

# PACIFIC PETROLEUM GEOLOGIST NEWSLETTER

of the Pacific Section
American Association of Petroleum Geologists

FEBRUARY/MARCH 1987 NO. 2

## President's Corner . . .

Most importantly, included in this issue of the Newsletter is the list of candidates and their respective resumes for the offices of the Section for the 1987/88 year. We will elect a president-elect, vice president, secretary, and treasurer. All of the offices are for a oneyear term except the treasurer's, which is for two years. Past President Lucy Birdsall as Chairperson of the Nominating Committee assembled a list of excellent and dedicated candidates. As stated in the Constitution of the Section, the slate of candidates shall be announced in the Newsletter five weeks prior to the election. Additional nominations may be made by written petition of 25 or more members of the Section in good standing, received by the Secretary within two weeks following publication of the Nominating Committee's slate of candidates. Voting shall be by mailed ballot. Bonnie Bloesser, Secretary, will set a date for counting of the ballots and ballots will be mailed to all members not less than three weeks prior to this date.

In January, I had the opportunity to attend "AAPG day" at National headquarters in Tulsa, Oklahoma. The purpose of this annual event is twofold. First, it is to familiarize Section and Society presidents, and certain other AAPG functionaries, with what Fred Dix and his staff are doing and how they can assist us in our work, and secondly, besides outlining our Section's activities and objectives, I had the opportunity to hear what is happening with other Sections and Societies through their representatives.

Over 50 members attended the event along with the National Executive Committee and the AAPG staff. I was impressed not only with the attendees' awareness of the concerns within our Association today, but with the dispatch and skill the Executive Committee and Staff are performing in keeping our Association a viable and strong entity. If any of you are ever in the Tulsa area, I certainly recommend your visiting National headquarters. Fred Dix and his staff will assure your time spent at the complex to be a very rewarding experience.

### ROBERT LINDBLOM

### Section Hosts Alternate Career Seminar

Approximately 65 explorationists attended a seminar held Saturday, March 28, 1987 at College of the Canyons in Valencia. Speakers addressed the issue of how to go about getting started (read: get a job) in the fields of hydrogeology, science teaching, engineering geology, and hazardous waste disposal when your background is in petroleum geology. We found that the speakers had been successful in making the transition for a wide variety of reasons, including being lucky! We also learned that a sharp reduction in income from that experienced in petroleum would most likely accompany entry into any of these fields. The opportunity for income growth is definitely there, however.

We owe a resounding "Thank You" to our speakers, who donated their time and energies in an effort to provide critical information and guidance to their beleaguered colleagues. Those who so generously gave of their time were: Mike Rector, Ed Karp, Karl Anania, Glenn Brown, Sue Kiser, Bob Michael, and Rick Dreessen.

The seminar was sponsored and paid for by the Pacific Section as part of AAPG's commitment to aid members who have been displaced by the economic downturn in the petroleum industry.

## CPUC Opposes EOR Gas Pipeline

The state Public Utilities Commission has filed to oppose the certification by the Federal Energy Regulatory Commission (FERC) of an interstate natural gas pipeline to serve a small number of oil companies engaged in enhanced oil recovery (EOR) operations in Kern County.

The commission's opposition to the pipeline applications, filed by Kern River Gas Transmission Company and Mojave Pipeline Company, was contained in the the prepared testimony of its President, Stanley W. Hulett, and its economic witness, William W. Hogan, Chairman of the Public Policy Program at the Kennedy School of Government at Harvard University.

Noting that the commission had asserted state jurisdiction over the Mojave and Kern

River proposals, President Hulett stated that even if the jurisdictional claims were ultimately rejected, the FERC should give "great weight" to the commission's views.

Contending that the reasonable service needs of the oil companies could be met by California's gas public utilities without construction of a new pipeline, Hulett stated, "Bypass of the existing public utility local distribution system by an interstate pipeline would result in an enormous adverse financial impact on residential, commercial and industrial gas customers who remain on the utility system." He placed that impact in the range of \$153 million to \$11.5 billion, depending on the size of the fixed cost contribution lost by the utilities over a period of years.

Hulett also noted that a Draft Environmental Impact Report jointly prepared by the state and federal governments had concluded that utility service of the Kern County oil companies through the existing pipeline system would be "far superior", from an environmental perspective, to construction of a costly and largely redundant interstate pipeline.

Testimony opposing certification of the proposed pipelines was also filed by Pacific Gas and Electric Company, Southern California Gas Company, and Sylvia M. Siegel, Executive Director of the consumer group, Toward Utility Rate Normalization (TURN).

Hearings in the FERC case are expected to take place this summer.

## Dibblee Foundation Plans Dinner

A dinner honoring Tom Dibblee, a living legend among California field geologists and still professionally active at 75, will be held Friday evening, June 12, in Santa Barbara at the new Fess Parker's Red Lion Resort under the sponsorship of the Thomas Wilson Dibblee Geological Foundation, Arthur O. Spaulding foundation president, has announced.

The event is timed to follow the American Association of Petroleum Geologists national convention in Los Angeles and a two-day, post-convention Dibblee-led field trip.

Net proceeds from the \$100 a plate dinner will be used by the non-profit foundation to

(Continued on page 2)

(Continued from page 1)

continue its goal of publishing, in color, a selection of approximately 100 of Dibblee's famed maps not now in print.

In his career spanning more than 50 years, Tom Dibblee studied and mapped more than 10,000 square miles of California, including the San Andreas Fault, and a 40-mile adjacent strip, from the Mexican border to San Francisco Bay. The "Dibblee map" has become a standard reference for virgually every geologist working the state in the past half century.

In addition to fellow geologists, the dinner is expected to attract representatives of the many California industries for which Dibblee's geological studies and definitive data are significant.

Dinner reservations can be obtained from the Dibblee Geological Foundation, Box 60560, Santa Barbara, CA 93160.

## DOI Announces Proposal for OCS Leasing

After more than two years of consultation with the Congress and the State of California and in-depth analysis, Interior Secretary Don Hodel on February 2nd submitted to a special Congressional panel a draft proposal for oil and gas leasing on the Outer Continental Shelf (OCS) offshore California.

"This amalgamated proposal charts a reasonable and environmentally responsible course for exploration and development of the OCS oil and gas resources off California," Hodel said. "We have blended elements of the Department's originally proposed 5-year program with numerous recommendations from California Governor George Deukmejian and Congressman Ralph Regula of Ohio, as well as those of Congressman Leon Panetta of California, into an amalgamated draft proposal."

In the absence of broad support from the Congress which provides certainty, it would appear there is no acceptable middleground. That probably would leave us with no alternative other than to treat the OCS program offshore California in the same manner prescribed by the OCS Lands Act for all offshore areas. There would be no purpose in continuing to seek, as our amalgamated proposal does, a way to confer a special exception for California from the leasing policies and process established by law."

The Interior Department is mandated by 1953 and 1978 laws to expedite oil and gas leasing in the federal OCS, generally that area more than three miles off the coast. Between 1982 and 1985, however, Congress placed moratoria on federal leasing on more than 40 million acres offshore California beleived to contain substantial oil and gas resources.

The draft proposed program would make available for leasing 1,120 tracts, or about 13 percent, of the offshore area previously under congressional moratoria. It would exclude from the forthcoming 5-year program approximately 56 million acres, equivalent to about 74 percent of the three California OCS planning areas. These include 5.4 million acres deferred in Interior's February 1986 Proposed 5-Year Program.

Deferrals include areas off Cape Mendocino and Punta Gorda, Cordell Bank, San Francisco Bay, Monterey Bay, Big Sur, Santa Monica and San Diego, the areas offshore Point Reyes Wilderness, Point Reyes-Farallon Islands National Marine Sanctuary, Channel Islands National Marine Sanctuary, the Santa Barbara Federal Ecological Preserve and Buffer Zone, and the San Nicolas Basin also are deferred.

Other key features of the draft amalgamated proposal, which covers the 5-year period from mid-1987 through mid-1992, include:

- A presale process which focuses on promising acreage, rather than the "areawide" concept employed by the current 5-year program.
- Five standard lease sales during the 5-year program, two each in the northern and southern OCS planning areas and one in the central area. As requested by Governor Deukmejian, sales are on a 3-year cycle for each planning area rather than the current program's 2-year cycle.
- Annual small supplemental sales of selected reoffering and development blocks.
- •Policies to assure receipt of fair market value.

The proposal also includes a commitment to provide levels of protection similar to those mitigations previously negotiated with the State. This was a special request by the Governor.

"We are bending over backwards to accommodate the concerns of Californians," Hodel said. "It's time for Congress to decide whether we are to have a federal offshore program, or a program essentially limited to the Gulf of Mexico."

The Secretary is required to submit to Congress a 5-year plan for the leasing of federal offshore areas which, he noted, "belong to the Nation." The current program ends in mid 1987

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### **Recent Moves**

Cornelius K. Ham from Ogle Petroleum Inc. to H&R Resources Associates in Carpenphone 684-7741. teria, (805)Thompson, formerly Manager, Petroleum Information Bakersfield to Property Control Officer Kern County Sheriffs Dept. Vern Jones & Associates to new offices at 555 University Ave., Suite 180, Sacramento. Robert E. Horton and Sanchez-O'Brien Oil & Gas Corp. to new offices at 645 Westlake Blvd., Tahoe City. Mailing address: P.O. Box 96, Tahoe City, CA 95730, Phone: (916) 525-5742. Dr. Charles Adelseck, president of Keyex Corp. has formed Oilfield Professionals Exchange Company (OPEC) a computer based registry listing needs and services within the international petroleum industry. Address: 323 E. Matilija, Suite 112-144; Ojai, CA 93023. Phone: (805) 646-0716. Burns Geological Exploration, Inc. has opened an office in Bakersfield, 5630 District Blvd., Suite 126, Phone (805) 398-2204.

### In Memory

Herman W. Weddle died December 30, 1986 in Bakersfield. Herm, as he was known to associates, retired from Standard Oil Company of California (Chevron) in 1960 after 33 years of service; he was Division Development Geologist at the time.

He was active in A.A.P.G. and Pacific Section, but he may best be remembered for his training of many young geologists who are now widely scattered throughout the industry.

Donations in his memory may be made to the California Well Sample Repository, 9001 Stockdale Highway, Bakersfield, CA 93311.

James R. Weddle

# Northern California

Bob Lindblom scored a hole-in-one at the Stanford Golf Club March 14, 1987. He used a five iron on the 150 yard 8th hole. This is his second hole in one since late Pleistocene time.

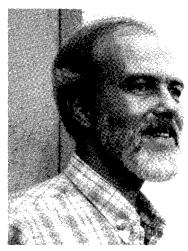
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## CANDIDATES FOR OFFICE — PACIFIC SECTION AAPG



JACK H. WEST Candidate for President-Elect

### **Present Position:**

Exploration Manager, West Coast Region, Cities Service Oil and Gas Corp., Bakersfield

#### **Education:**

1957, University of Oregon, B.S. 1961, University of Oregon, M.S.

### **Employment:**

1961-78: Texaco, Los Angeles and Bakersfield

1978-83: Occidental Petroleum, Bakersfield

1983-Present: Cities Service, Bakersfield

### **Professional Activities:**

Past president and vice president, San Joaquin Geological Society Member, AAPG Member, SPE

San Joaquin Well Logging Society



JACK R. SHEEHAN
Candidate for President-Elect
Present Position:

Consulting Geologist

### Education:

1953, Oregon State College, B.S. 1955, University of California at Berkeley, M.S.

### **Employment:**

1955-71: Standard Oil Co. of California, Geologist

1971-75: Tetra Tech, Inc., Division Geologist

1975-1982: Champlin Petroleum Co., Division Development Geologist

1982-1984: Santa Fe Energy Co., Western Region Exploration Manager

1984-1985: MCO Resources, Western Region Exploration Manager

### **Professional Activities:**

1979: AAPG Pacific Section Convention, Technical Program Editor

1981-85: AAPG House of Delegates, Alternate

1980: President, Southern California Well Logging Society

1985: President, California Section, American Institute of Professional Geologists

Present: Secretary, South Coast Geologic Society



EDWARD C. (Ben) CAHILL Candidate for Vice President

### **Present Position:**

President-Owner, EnergyLog Corp.

### **Education:**

1956, University of the Pacific, B.S.

### **Employment:**

1956-74: Logging Geologist, Exploration Logging, Sacramento

1975-77: Supervisor, Western Region USA, Exploration Logging1978-Present: President - Owner, EnergyLog Corp., Sacramento

### **Professional Affiliations:**

Pacific Section AAPG, AAPG, Pacific Section SEPM, Northern California API, CIPA, Sacramento Petroleum Association.

### **Professional Activities:**

1977: Vice President, Sacramento Petroleum Association

1978: President, Sacramento Petroleum Association

1983: General Chairman, Pacific Section AAPG-SEPM-SEG Convention

1980-84: House of Delegates, National AAPG

1984-86: Committee on Membership, National AAPG



THOMAS E. HOPPS
Candidate for Vice President

### **Present Position:**

Consulting geologist — Rancho Energy Exploration Co., Ventura, California

### **Education:**

1969, California State University at Long Beach, B.S. Geology

### **Employment:**

1964-69: Signal Oil and Gas Co., Technical Assistant.

1970: Burlington Northern Railroad, Field Geologist

1973-1979: Argo Petroleum Corp., Geologist.

1979-Present: Consulting Petroleum Geologist.

### **Professional Activities:**

Member AAPG

Contributor to Pacific Section Guidebooks 1975-76: Sect., Coast Geological Society 1976-77: Vice-President, Coast

### Geological

Society

1981-82: President, Coast Geological Society

1982: AAPG Treasurer, Pacific Section Annual Meeting

1987: Chairman, Pacific Section Subcommittee, Eel River Basin Correlation Section

1988: Finance Coordinator, Pacific Section Annual Meeting

### **Photo Not Available**

### MARTY HALL-BURR

**Candidate for Treasurer** 

### **Present Position:**

Geologist, UNOCAL International, Los Angeles

### **Education:**

1976, California Lutheran, B.S.1979, Northern Arizona University,Flagstaff, M.S.

### **Employment:**

1979-80: Phillips Petroleum International

1980-Present: UNOCAL International

### **Professional Activities:**

1984: Vice President Los Angeles Basin Geologic Society

1985-86: President LABGS 1986-92: Delegate AAPG

1987: Tobin Theatre Project for AAPG National Convention



KENNETH F. HERSH Candidate for Secretary

### **Present Position:**

District Exploration Manager, NOMECO

### Education:

1971, Univ. of Southern California, B.S. 1973, Univ. California Santa Barbara, M.A.

### **Employment:**

1973-77: Union Oil Company, Bakersfield

1977-79: Husky Oil Company, Santa Maria

1979-80: Occidental Exploration and Production Company, Bakersfield

1980-Present: Northern Michigan Exploration Company, Bakersfield. District Exploration Manager for California, Oregon, Washington and Nevada.

### **Professional Activities:**

Past Secretary San Joaquin Geologic Society

1987 Present President SJGS

Member National AAPG, Northern
California Geologic Society, Coast
Geologic Society



**BRUCE BARRON**Candidate for Treasurer

### **Present Position:**

Geologist, Strata Analysts Group

#### **Education:**

1953, Univ. California Los Angeles, B.A.

### **Employment:**

1953-59: Pacific Oil Well Logging1959-77: Oil Well Research Inc.1978-Present: Strata-Analysts Group,Santa Ana

### **Profesional Activities:**

Section AAPG

1975 Convention General Chairman,
Pacific Section AAPG
1978 President, Los Angeles Basin
Geological Society
1986-Present Finance Chairman, Pacific



PAUL HACKER
Candidate for Treasurer

### **Present Position:**

Consultant

### **Education:**

1979, CSUN Geography, BA 1982, CLC Geology, BS

### **Employment:**

1974-1980: Don Padick Geologic Well Logging Service, Geologist 1980-82: Argo Petroleum Corp.

Geologist

1982-85: Bravo Oil Co. / Santa Fe Energy

Exploration Geologist 1985-Present: Consultant

### **Professional Affiliations:**

National AAPG, Pacific Section AAPG, Pacific Section SEPM, SJGS, CGS

### **Professional Activities:**

1987: San Andreas Field Trip Committee1986: Bakersfield, AAPG ProgramCommittee

1985: East Side San Joaquin Field Trip Committee

1984: San Diego, Co-Chairman, Sacramento Valley Gorges Sympsium

1984: Secretary, Pacific Section AAPG 1981: Treasurer, Coast Geologic Society

# San Foaquin

From the far north comes word that the Canadian Well Logging Society has announced W.R. (Rick) Berry is the winner of the CWLS 1986 Presidents Award for best paper on formation evaluation. The award, for a paper entitled "An Organized Approach to Petrophysical Field Studies", was presented at the May luncheon meeting.

"The paper was based upon the same strategy I use everyday in the San Joaquin Valley," Rick said. "It stressed geological and engineering input used in a multi faceted petrophysical approach. I also stressed the need to integrate field studies with subsequent use of simultaneous geological or engineering studies. This can quickly be done using custom tailored graphics for cross section and map needs, or tabular listings for zone summaries for engineering reports. Furthermore, archived data bases from field studies can be updated with subsequent TDT logs or logs from infill drilling as an aid to EOR projects. These days, with exploration down, we shouldn't overlook the use of a complete field study as an analog in developing exploration strategies for better times," Rick mused.

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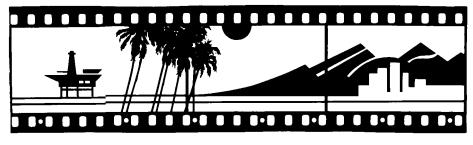
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### **National AAPG Convention Schedule**

Saturday, June 6 8:00 a.m.-5:30 p.m.

Sunday, June 7

7:30 a.m.-8:00 p.m. 9:00 a.m. 5:00-8:00 p.m.

Monday, June 8

8:00 a.m.-7:00 p.m. 8:30-11:00 a.m. 11:00 a.m.-8:00 p.m. 11:30 a.m.-1:00 p.m. 1:30-5:00 p.m. 5:30-7:30 p.m.

Tuesday, June 9

8:00 a.m.-5:00 p.m. 8:00 a.m.-6:00 p.m. 8:30-12:00 noon 11:30 a.m. 11:30 a.m. 11:30 a.m.

12:30 p.m. 1:30-5:00 p.m.

7:00-9:00 p.m.

Wednesday, June 10

8:00 a.m.-12:00 noon 8:00 a.m.-1:00 p.m. 8:30-12:00 noon 1:30-4:30 p.m.

Registration

Registration House of Delegates Meeting Icebreaker/Exhibition

Registration Opening Session Exhibition All-Convention Luncheon Technical Sessions All-Alumni Party

Registration Exhibition Technical Sessions SEPM Luncheon DPA Luncheon EMD Luncheon SEPM Annual Business Meeting **Technical Sessions** "Down and Out in LA" Party

Registration Exhibition **Technical Sessions** Technical Sessions



### Readers Corner

GEOLOGICAL SOCIETY OF AMERICA. BULLETIN, vol. 98, no. 1, January 1987

Stratigraphy and structure of metamorphosed upper PALEOZOIC ROCKS NEAR Mountain City, Nevada, by Timothy A.

A geologic interpretation of seismic-refraction results in northeastern California. by G. S. Fuis, J. J. Zucca, W. D. Mooney and B. Milkereit.

Geology of the Holocene surficial uranium deposits of the north fork of Flodelle Creed, northeastern Washington, by Samuel Y. Johnson, James K. Otton, and David L. Macke.

GEOLOGICAL SOCIETY OF AMERICA. BULLETIN, vol. 98, no. 2, February 1987

Geology of southern Prince of Wales Island, southeastern Alaska, by George E. Gehrels and Jason B. Saleeby.

Provenance of sandstone inclusions in the Paleozoic Sierra City mélangé, Sierra Nevada, Calif., by Gary H. Girty and Charles H. Pardini.

Neogene clockwise techtonic rotation of the eastern Transverse Ranges, California, suggested by paleomagnetic vectors, by James N. Carter, Bruce P. Luyendyk, and Richard R. Terres.

Correlation of upper Cenozoic tephra layers between sediments of the western United States and eastern Pacific Ocean and comparison with biostratigraphic and magmetpstratographic age data, by A. M. Sarna-Wojcicki, S. D. Morrison, C. E. Meyer, & J. W. Hillhouse.

Unconformity-bounded stratigraphic units, by Internation Subcommission on Stratigraphic Classification (Amos Salvador, Chairman).

authigenic Methane-derived carbonates formed by subductioin-induced porewater expulsion along the Oregon/ Washington margin, by Scott Ritger, Bobb Carson & Erwin Suess.

GEOLOGICAL SOCIETY OF AMERICA BULLETIN, vol. 98, no. 3, March 1987

Petrogenesis of gabbronorite at Yakobi and northwest Chichagof Islands, Alaska, by Glen R. Himmelberg, Robert A. Loney, and Peter I. Nabelek.

Rates and processes of soil development on Quaternary terraces in Cajon Pass, California, by Leslie D. McFadden & Ray J. Weldon.

Crustal structure of western Nevada from COCORP deep seismic-reflection data, by T. A. Hauge, R. W. Allmendinger, C. Caruso, E. C. Hauser, S. L. Klemperer, et al.

Crustal structure of north-central Nevada: Results from COCORP deepseismic profiling, by Christopher J. Potter, Char-shine Kiu, Jiazheng Huang, Li Zheng, (Continued on page 6) (Continued from page 5)

Thomas A. Hauge, Ernest C. Hauser, et al.

- Probable low-pressure intrusion of gabbaro into serpentinized peridotite, northern California, by Kathleen R. Schwindinger and Alfred T. Anderson, Jr.
- GEOLOGY, vol. 14, no. 11, November 1986
- Microspherules in Upper Cretaceous and Lower Tertiary clay layers in Gubbio, Italy, by H. Richard Naslund, C. B. Officer, G. D. Johnson.
- GEOLOGY, vol. 15, no. 1, January 1987
- U-Pb ages of granitoif casts in upper Mesozoic arc-derived strata of the Vizcaino Peninsula, Baja California, Mexico, by David L. Kimbrough, James J. Hickey, and Richard M. Tosdal.
- Maturation anomalies in sediments underlying thick volcanic strata, Oregon: Evidence for a thermal event, by Neil S. Summer and Kenneth L. Verosub.
- Ellesmerian(?) and Brookian deformation in the Franklin Mtns, northeastern Brooks Range, Alaska, and its bearing on the origin of the Canada Basin, by J. S. Oldow, H. G. Avé Lallemant, F. E. Julian, and C. M. Seidensticker.
- Granite of the batholiths of California: Products of local assimilation and regionalscale crustal contamination, by Jay J. Ague and George H. Brimhall.
- GEOLOGY, vol. 15, no. 2, February 1987
- Isitopic evidence for climatic influence on alluvial-fan development in Death Valley, California, by Ronald I. Dorn, M. J. DeNiro and H. O. Ajie.
- Metasomatism and partial melting in a subduction complex: Catalina Schist, southern California, by Sorena S. Sorensen and Mark D. Barton.
- Stable isotope compositins of fossil mollusks from southern California: Evidence for a cool last interglacial ocean, by Daniel R. Muhs and T. Kurtis Kyser.

- Extent of the Nevadan orogeny, central Sierra Nevada, CA, by Othmar T. Tobisch, Scott R. Peterson, Samuel Longiaru, and Tapas Bhattacharyya.
- Uranium series ages of corals from the upper Pleistocene Mulege terrace, Baja California Sur, Mexico, by James R. Ashby, T. L. Ku, and John A. Mich.
- Tectonic denudation of the Shuswap metamorphic terrane of southeastern British Columbia, by Richard L. Brown and J. Murray Journeay.
- Late Miocene reactivation of Ancestral Rocky Mountain structures in the Texas Panhandle: A response to Basin and Range extension, by Roy T. Budnik.
- New estimates of displacement along the San Andreas fault in central California based on paleobathymeatry and paleogergraphy, by Richard G. Stanley.
- GEOLOGY, vol. 15, no. 3, March 1987
- Thermal maturity of the Cambria slab, an inferred trench-slope basin in central California, by Michael B. Underwood, and David G. Howell.
- Is the continental Moho the crust-mantle boundary?, by W. L. Griffin and Suzanne Y. O'Reilly.
- Possible evidence for subducted sedimentary materials beneath central California, by Anne M. Trehu and Walter H. Wheeler, IV.
- Paleogeographic implications of Permian Tethyan corals from the Klamath Mountains, California, by M. Meghan Miller and James E. Wright.
- Continuation of Antler and Sonoma orogenic belts to the eastern Sierra Nevada, California, and late Triassic thrusting in a compressional arc, by Richard A. Schweickert and Mary M. Lahren.
- FORUM: Late Precambrian tectonism in the Kingston Range, southern California, by Bennie W. Troxel, Matthew A. McMackin, J. P. Calzia, J. Douglas Walker, David W. Klepacki and B. C. Burchfiel.

### 

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PPG DEADLINE for APR./MAY ISSUE MAY 30

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FIRST CLASS



# PACIFIC PETROLEUM GEOLOGIST NEWSLETTER

of the Pacific Section American Association of Petroleum Geologists

APRIL/MAY 1987 NO. 3

### President's Corner . . .

This is my last "Corner" as president of the Pacific Section and I would like to share some thoughts with you. The Section has had a distinguished history of its membership achieving the highest office in AAPG. Since 1950, seven of our own have been elected president. As we enter the new year, 1987-1988, the Section again has one of its members leading AAPG. Lawrence W. Funkhouser will begin his term July 1, 1987. Larry retired in 1986 after 38 years service with Chevron Corporation. At the time of his retirement, he was director and vice president, Exploration and Production. We all wish him the best of success as president of our Association.

In my first "Corner," I outlined two objectives on which the Section should focus its attention. One of them concerned unemployment of geoscientists. Over 70 members attended an Alternative Employment Seminar sponsored by the Section in February at Valencia, California. The success of this event reflected the hard work and skilled preparation by Dan Pasquini and his committee, Jack H. West and Bob Nesbit. The second involved the Pacific Section acting as host for the 72nd Annual Meeting of AAPG in Los Angeles, June 7-10, 1987. We also sponsored four field trips and two short courses. The entire Section can be proud of the effort and work performed by so many members assuring our participation in making the meeting a success. My last, but not least, kudos and thanks go the Executive Committee and the various Committee Chairpersons for their help, total support, and counsel during my term. Any accomplishments the Section achieved must be shared by all of these people. Finally, I want to express my gratitude and the sincere honor in serving as your president this past year. It has been an opportunity and experience I will not forget.

ROBERT LINDBLOM

### **GREEN & ASSOCIATES**

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KEITH E. GREEN

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### Pacific Section Member Honored

H. Victor (Vic) Church has been awarded honorary membership in the AAPG for promoting the goals of AAPG as author, chairman, committeeman, judge and national officer; for the successful application of geology to oil and gas exploration and production.

The following was prepared by Edwin H. Steinmeyer and was excerpted from 1987 Annual AAPG convention book of abstracts.



H. Victor Church was born in Berwyn, Illinois, a suburb of Chicago, in 1915. After graduating from the high school where his father was principal, he entered Carleton College, Minnesota, on a four-year scholarship. He majored in geology, was elected to Phi Beta Kappa and graduated magna cum laude in 1936.

California Institute of Technology offered him a Fellowship where he received his MS in geology in 1937. He then entered the University of Chicago on a Fellowship to begin work on his PhD, which was granted to him in 1940 for his work in the Gros Ventre Range of Wyoming. That was the year he married his college sweetheart and they moved to Utah where Vic taught at Utah State College in Logan for four years before moving to Deep Springs Junior College east of Big Pine.

He left the teaching profession to join Shell Oil Company in Bakersfield, California, in 1945 and progressed rapidly, being named District Geologist within three years. Shortly thereafter, a small expanding firm, Oceanic Oil Company, offered him the position of Chief Geologist, later becoming Exploration Manager, and there followed an aggressive exploration program which resulted in numer-

ous successes. But his desire to become independent led him first into a partnership (Beach, Church and Bell), and then, in 1961, into consulting which he continues to the present. Concurrently he was Manager of Exploration for the small Vista Petroleum Company (1962–65) and (from 1969) a co—ownership in G.E.C. Oil and Gas Company (Green, a drilling contractor; Eastman, an engineer; and Church).

Vic has been an active member of AAPG for forty years. He has delivered papers at National, Pacific Section and local meetings, and has served on various society and national committees, including the Advisory Council (1983-86). He has been president of the San Joaquin Geological Society (1952-53), and Chairman of the House of Delegates (1980-81), and was awarded Honorary Life Membership in the Pacific Section (1982).

He was active in establishing a Well Sample Repository at California State College at Bakersfield in 1976, and is the consultant and project manager of this facility, which is the only one in California open to the public. It is widely used by the oil industry, government agencies, colleges, and students, both in and out of the state.

Vic has always had a deep love for classical music, which led him to contribute to the community by active participation in the Bakersfield Symphony, and by presiding as president of several Bakersfield music organizations. Other hobbies include tennis and travel. He and Virginia together have been to one hundred ten countries on six continents, and Vic recently added the seventh continent, Antarctica, where he swam in the waters off Deception Island.

Edwin H. Stinemeyer

## Eel River Basin Symposium Planned

The San Joaquin Geological Society (SJGS) has announced a two-day symposium entitled "Tectonic sedimentation and evaluation of the Eel River and associated coastal basins of Northern California." More than a dozen papers from well known geoscientists working the Northwest have been accepted for presentation in the October 12 & 13 symposium. The Dore Theater at California State College at Bakersfield will be the locale with registration set at \$200. To register send: \$200 (checks only) to SJGS, P.O. Box 1056, Bakersfield, CA 93302.

# First Production From Sale 53 On April 13, 1987, at 2:00 p.m. the first

On April 13, 1987, at 2:00 p.m. the first sustained oil production from a Lease Sale 53 tract was lifted to the surface from Well A-4 on UNOCAL's Platform Irene in the Point Pedernales Field. Production began at 2500 Bbls./D, and is expected to increase to 20,000 Bbls./D by years end. Federal leases in the California OCS currently produce 80,000 Bbls./D.

Federal Lease OCS-P 0441, located approximately 16 miles west of Lompoc (3½ miles off Point Pedernales), was leased to Union Oil Company (UNOCAL's predecessor) and two partners during the Central-Northern California Lease Sale 53. Since the sale this lease has been transfered to the Southern California Planning Area.

Oil was discovered on Lease OCS-P 0441, in January 1983 and Platform Irene was set 21/2 years later on August 7, 1985. Platform Irene is in the Point Pedernales Unit Area which was approved by the Minerals Management Service in September 1986 after almost 2 years of negotiations. The unit consists of portions of six leases in the Santa Maria Basin, including OCS-P Nos. 0437, 0438, 0440, 0441, 044 and 0510. Those sharing interest in the tracts are UNOCAL and its partners, Chevron and Mobil; Exxon; ARCO and its partners, Amoco, Elf Aquitane, Champlin and Phillips. The bonuses paid for the tracts totaled \$123,426,505.20.

### **New Members**

**COAST** 

Michael Veseth - Ventura

### LOS ANGELES

Barrett S. Duff — Granada Energy, So. Pasadena; Elmer Reese — City of L.A.

### **NORTHWEST**

Dan E. Wermiel — Dept.of Geol. & Minerals, Portland.

### SAN JOAQUIN

Marshall G. Ayres — Bakersfield

### **Recent Moves**

As of July 1987 Texaco will close its west coast exploration offices and transfer the retained staff to Houston: Norman K. Anderson, David Angstadt, Greg Bly, Jack Connelly, Stephanie Dana, Edward Dittmar, John Eke, Joe Gathman, John D. Gilliland, Tim Harvey, Greg Hines, Mike Hoffman, Edward W. Hudson, Jeffrey R. Johnson, Colin Key, Rob Kimmel, Robert G. Knoll, John S. Kovacs, Lynn McPhee, Andy Moran, James E. Powers, Leorrane Robin, Ezat Sayah, Tom St. Clair; to Denver: James V. Bent Jr., C. Michael Clayton, Mark R. Cole, Corla Davis, Steve Decker, John and Julia Dombrowski, Jon H. Luksch, Donald S. McDougall, Robert Moll, Steven Moore, David C. Nelson, Jeffrey C. Neulman, Douglas Seedorf, Montgomery C. Steele, Otis Walters, Steven Williams; to Texaco Ventura Production: Nancy B. Aston, Gary R. Jacobson, Ed. Paden and Don Ware; to Texaco New Orleans: Jim Mackay; going back to school: Bonnie Bloeser — USC doctorate program, Richard P. Heberton — UCLA MBA program, Jill Stelzer — UCLA Masters engineering program, Scott H. Stevens — Harvard Masters Regional Studies, East Asia

Susan S. Mastoris from Texaco to Landmark, Houston.

### **Recent Retirements**

Charles W. Heppe from Texaco after 22 years; Lucy E. Birdsall, past Pacific Section and LABGS president, from the U.S. Geological Survey Public Information Office, Los Angeles, to consulting, phone (818) 244-5117. There are few geoscientists in Southern California who haven't been helped, at one time or another, by Lucy in finding hard to get maps, out-of-print government publications, plus some extra sources of information available elsewhere. Fewer still will recall that Lucy opened the Los Angeles PIO for the U.S.G.S. in 1953. Lucy, your sparkling 'geo--logical survey" on the other end of the phone will be sorely missed, along with your exquisite knowledge of published geological information, the next time we call.

# Northwest

The new officers and directors of the Northwest Petroleum Association for 1987-88 are:

. . . R. E. (Andy) Corcoran President Consulting Geologist, Portland . . W. F. (Bill) Covert Vice President Cavenham Energy, Portland . . . . Dennis Olmstead Secretary DOGMI, Portland . . . . . . Barb Portwood Treasurer Cavenham Energy, Portland . . . . . George Sharp Jr. Director (Western Washington) . . . . R. J. (Bob) Deacon Director (Eastern Washington & Oregon) Directors-at-Large . V. C. (Vern) Newton Bill Lindley

# Los Angeles

The Los Angeles Basin Geologic Society annual field trip will be October 17 & 18. Dr. Marty Link, Mobil Research, aided by Tom W. Dibblee Jr., will lead the trip through the Ventura Basin.

Structural elements and stragraphic section from Upper Cretaceous to Pleistocene will be highlighted especially as they relate to hydrocarbon traps. One day will involve a trip up Wheeler Gorge along Highway 33, and the other will be a coastal traverse from Carpenteria to Pt. Mugu. With an overnight in Ventura there will be plenty of time for discussion, rebuttal, and attitude adjustment!

Mark your calendars now this will be a good one you wouldn't want to miss, details will be available from trip chairman, Mike Mulhern, (805) 653-1579, later this summer.

# Northern California

The annual NCGS Short Course with Field Trip was held on May 15-16, 1987. Dr. H. Edward Clifton, President SEPM, presented the short course on "Pacific Shelf and Coastal Depositional Facies." Dr. Clifton also led the field trip which examined seacliff exposures of the Pleistocene Merced Formation from Pacifica to Fort Funston, San Francisco. Gary Gassaway with the Terra Linda Group provided refreshments and everyone enjoyed the trip.

Election of the 1987-1988 NCGS officers was held at the May 21st meeting at the San Ramon Country Club. The following people were elected:

President Tom Mason
President-elect Linda Thurn
Vice President Ron Crane
Secretary Jason Donchin
Treasurer Gordon Manings
Program Chairman
Larry McKague Counselor
Counselor Nahum Schneiderman

Roger Alexander, retired Chief Geologist, Chevron Overseas Petroleum, Inc., gave a talk and slide presentation on "Chilean Fjords and Northern Antarctica — Harsh Frontiers and Natural Treasures."

On Saturday, June 20, 1987, the NCGS meeting will be held at the Bay Model Visitor Center in Sausalito. A working model of the San Francisco Bay will be observed. The model is approximately one acre in size. The tour starts at 4 p.m. and members are encouraged to bring spouses, children, and friends. Please telephone reservations to Saul Germanas at (415) 842-0914 by June 15.

NCGS meetings are held monthly from September to June. Please direct any questions concerning membership to Jason Donchin, Chevron USA, P.O. Box 5042, San Ramon, CA 94583-0942.

### **Election Results**

The results of the election for the 1987-88 Pacific Section officers are as follows:

President . . . . Dan E. Pasquini
President Elect . . . Jack H. West
Vice President Edward C. (Ben) Cahill
Secretary . . . Kenneth F. Hersh
Treasurer . . . . . Paul Hacker

These officers will assume their respective duties July 1, 1987, and with the exception of the treasurer, who serves for two years, will serve until June 1988.

### L.A. A Haven In Hard Times

The party was called "Down and out in L.A." but the Annual AAPG Convention was anything but! There were fire eating speeches (M. T. Halbouty), expressions of cautious optimisim from officials from the majors, field trips, short courses, a theater showing classic earth science films, hundreds of technical papers providing as wide a selection as anyone could desire.

To the rousing music from the University of Southern California Marching Band, General Chairman Bud Reid and AAPG President Bruno Hanson cut the ribbon formally opening the Exhibit Hall for the traditional Ice-Breaker party on Sunday afternoon.

Next morning, President of the host Section, Bob Lindblom, welcomed over 2,000 members and guests of AAPG at the opening session of the annual meeting in the Los Angeles Convention Center. The Pacific Section is the oldest affiliated section in AAPG. founded in 1924 in Los Angeles. The first annual meeting of AAPG held in California was in 1928 in San Francisco and since 1928 it has returned eight times to California for its annual meeting. The 1987 meeting is the sixth time it has met in Los Angeles and the Association will return to California for the 1990 meeting in San Francisco. National President Bruno Hanson, in his address to Monday's opening session, emphasized that petroleum geologists must become "lean, mean, and competitive in a new, more efficient industry." He said, "We cannot afford to go back to the old days of exploration and development," and that "in the future, an effort in reservoir geology will account for as much oil as — if not more than — the exploration geologist." He emphasized seismic's continued evolution and the importance of becoming "computer smart." He said, "Geology can contribute to the betterment of mankind but if we do not have an asset growth attitude, we will be part of history."

Later Monday at the all-convention luncheon, held in the Bonaventure Hotel, 800 people heard Ken Derr, Vice Chairman, Chevron Corp., give a cautiously optimistic but upbeat speech on the oil industry with emphasis on upstream activity.

An always important tradition of the meeting was presentation of the annual awards. The Sidney Powers Memorial Award was given to James E. Wilson. Pacific Section members receiving awards included John Harbaugh, Distinguished Service Award; Vic Church, Honorary Member; and Stephen Graham, John C. Sproule Memorial award. The Pacific Section A. I. Levorsen award was given to Rick Chamberlain and Vic Madrid for their paper given in Bakersfield in 1986. The Section also gave Honorary Life Membership to Lawrence Funkhouser, President-Elect of AAPG.

The Pacific Section AAPG sponsored four field trips and two short courses and the Pacific Section SEPM sponsored four field trips and one short course.

Final registration figures show 2,698 delegates and 4,675 total registrants including spouses and students. The exhibits were very well attended with 344 spaces from 150 vendors. These figures showed a significant increase from last year when 1944 delegates, 3841 total registration and 133 exhibitors participated.

In summary, the attendance at the 72nd Annual Meeting was a positive improvement from Atlanta. The technical and social programs were excellent and affordable. The cooperation was exemplary between Bud Reid and his committees and the various Section committees with Fred Dix and his capable Staff from national headquarters in Tulsa. The entire membership of the Pacific Section should be pleased for a job "well done" as host for this annual meeting.

## Final 5-Year OCS Program Proposed

In June and July 1985, the Department of the Interior (DOI) met six times with a Congressional group composed of several members from California. A preliminary agreement was reached as a result of those sessions and 11 California town meetings were conducted by the DOI to gather comments from the affected public. On the basis of further information, it was determined that the preliminary agreement was not acceptable because it eliminated far too much promising acreage from future leasing consideration. On December 19, 1985, Public Law (P.L.) 99-190 was enacted which directed the Secretary to work with a Congressional panel, consisting of members of the California Congressional delegation, ranking members of Congress, and committees involved in OCS issues to try to reach consensus on leasing issues. Thirteen representatives and five Senators were designated to participate in the California OCS discussion. A total of 16 meetings were convened in 1986. However, no consensus was reached. Congress then enacted section 11 of P.L. 99-591 which required the Secretary to consider three proposals for leasing offshore California. In addition to Governor Deukmeijan's proposal of May 7, 1986, proposals developed by Congressman Regula and Congressman Panetta were considered by the Secretary.

In February 1987, the Department submitted to the special congressional panel a Draft Proposed Final Leasing Program for offshore California in accordance with P.L. 99-190 and P.L. 99-591. The Proposed Final Program reflects recommendations contained in these proposals and consideration of comments received.

The Proposed Final Program provides for two sales in Northern California (1989 and 1992), two sales in Southern California (also 1989 and 1992), and one sale in Central California (1990).

Sales 91 and 128 will be the first Northern California sales held since Sale P1 held in 1963 which resulted in the issuance of 57 leases, sale 53, a Central-Northern California sale held in 1981 resulting in the issuance of 60 leases.

Decisions on subarea deferrals in the Proposed Final 5-Year Program reflect the balance struck based on the principles and considerations set forth by section 18 of the OCS Lands Act and the unique considerations legislated for the California OCS by P.L. 99-591.

Areas were deferred based on considerations of the geological and environmental characteristics of the area, industry interest in the area, comments made by the Governor and other affected parties, military use areas, existing leases, and the proposals preffered by Congressmen Regula and Panetta.

Areas remaining under consideration for leasing in the new 5-year program will be subjected to further analysis and consultation during the presale process for individual sales. The presale process of focusing on promising acerage provides for early resolution of any remaining conflicts.

The proposed final program would make available for leasing about 13 percent of the offshore area previously under congressional moratoria off California. It would exclude from the forthcoming 5-year program approximately 56 million acres, equivalent to about 75 percent of the three California OCS planning areas. This acreage includes 5.4 million acres deferred in Interior's February 1986 Proposed 5-Year Program; buffers around San Clemente Island and portions of Santa Catalina Island; as well as deep water areas generally beyond the 900 meter isobath in all three California OCS planning areas.

Interior announced intentions to include levels of protection similar to those recommended in Governor Deukmejian's proposal in individual leases at the time of the sale. The Proposed Final Program highlights all proposed stipulation topics for consideration during the sale-specific consultation process (in particular, the EIS scoping process pursuant to the National Environmental Policy Act and the consultation with the Governor at the time of issuance of the Proposed Notice of Sale required by section 19 of the OCS Lands Act) for OCS sales offshore California, including the following:

Governor Deukmejian's proposal for stipulations concerning: air quality; oil spills; transportation (pipelines); onshore facilities; fisheries; important biological resources; marine biota; discharges; oil processing; cultural resources; operations controls; hold harmless; hazardous dumpsites; navigation safety; water use; timing of operations; and protection of military areas.

Congressman Regula's proposal for stipulations concerning: air quality; oil spills; transportation (pipelines); and onshore facilities.

Congressman Panetta's proposal for stipulations concerning: air quality; oil spills; transportation (pipelines); onshore facilities; fisheries/biological resources; and discharges.

### A PROMISE MADE...

Is a debt unpaid, or so the poet says. By this standard the professional petroleum geologists of California are still owing.

Responding to the urgings of several geologists, James R. (Jim) Weddell and Victor (Vic) Church to name just two, California oil people and government regulatory agencies established the California Well Sample Repository around the middle of the last decade. What began with the promise of a noble endeavor soon faltered as less than half of the necessary \$500,000 endowment fund could be raised. To the credit of all involved the Repository has operated for more than 10 years, striving "to collect, classify or process, store, and make available to bona fide investigators, representative samples of California rocks, especially subsurface rocks from oil wells, and other subsurface information" as its charter specifies.

Today, more than 8000 donated cores have yet to be cataloged or properly stored, the planned "users facility" with basic laboratory equipment (binocular microscope, ultraviolet light, etc.) is unattainable, and sorely-needed steel shelving is unaffordable, as is the required strengthening of existing shelving for seismic safety.

Others have done their part. WOGA members contributed more than half of the original endowment, independents too have helped, government agencies added more than 10% (without their characteristic need for control!) and also provided \$3500-\$10,000/agency/year early on to help cover operating expenses. Professional societies (Pacific Section AAPG and SEPM, etc.), although participants, have been among the smallest contributors.

So it comes down to us to fulfill the promise. Will history laud the California petroleum geologists for making the extra effort to adequately archive the basic data of our craft, or will it record the slow strangulation and eventual takeover by government of this important aspect of our business? —Editor

### **Back To The Future**

Plans for the 1988 Pacific Section A.A.P.G., S.E.P.M., S.E.G., and S.P.W.L.A. Annual Meeting are underway. On the upside, the theme of the meeting is entitled "Back To The Future" and it's being held at the new Fess Parker Red Lion Inn adjacent to the Beach in Santa Barbara.

In true California spirit, golf, tennis and wine tasting events, as well as some exciting and productive technical sessions are being scheduled by General Chairman Jack Cunningham and his convention committee from the hosting Coast Geologic Society.

A two-day technical program of 20 minute oral presentations and poster sessions is planned. Abstract forms can be obtained from Technical Program Coordinator: Tom Redin,

756 Monte Vista Ave., Ventura, CA 93003. Abstracts are due by **October 1, 1987!** Notice of acceptance along with speaker or poster kits and presentation schedules will be mailed to the speaker's address by December 15, 1987. Abstracts accepted for the convention will be published in the March 1988 AAPG Bulletin.

### 934–29R Breaks State Depth Record

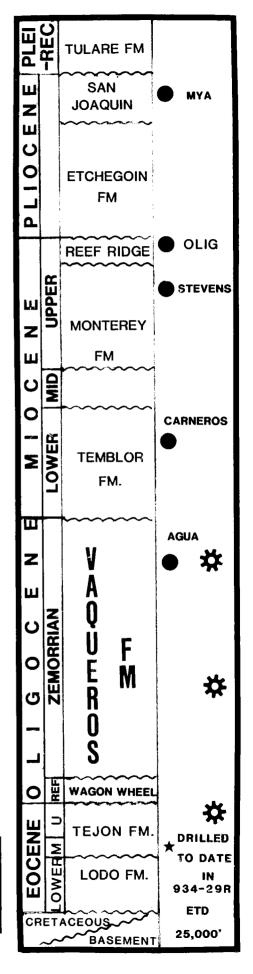
Thursday, June 4, DOE's 934–29R drilled past 22,711 feet, breaking the California depth record set by Tenneco in 1974 at an unsuccessful wildcat in the Sand Hills near Mettler Station, 16 miles south of Bakersfield. By Tuesday, June 23, the Parker drilling crews had reached 23,716 feet, deeper than record depth wells for New Mexico, 22,926 feet, and Florida, 23,264 feet. The states where drillers have gone deeper are: Mississippi, 25,460 feet; Wyoming, 25,764 feet; Louisiana, 26,500 feet; Texas, 29,670 feet; and Oklahoma, 31,441 feet.

A metal-bearing turbine behind a diamond bit was used to drill through the record depth. This assembly drilled for 268 hours before tripping out to replace the bit; that's more than twice the 100 hours obtained by the rubber-bearing turbine used up hole.

934–29R is the third in a three-well series designed to evaluate NPR-1's deep potential; so far there have been hydrocarbon shows near: 14,000, 17,000, and 21,000 feet. Neither of the other wells made a discovery. The California well was drilling in hard black shale when the record depth was passed, but since has encountered a sandstone horizon which is thought to be the third Point of Rocks member of the Eocene-aged Tejon Formation.

The Point of Rocks, which produces oil at shallower depths in other westside fields, but has not been evaluated at Elk Hills is thought by many "arm chair geologists" to have the highest potential for deep production. In fact these sideline speculators suggest that the 21,000 foot show was from the first Point of Rocks sand. Below the Eocene strata it is anticipated that rocks of Cretaceous age will be encountered before the programmed total depth of 25,000 feet or basement is reached. The Cretaceous, though never productive in the Southern San Joaquin Valley, did give Coalinga field its first oil production around 1899 and has been a prolific source of gas production in the Sacramento Valley.

Right: Generalized stratigraphy for the Elk Hills Field. Black dots indicate productive intervals in the Elk Hills Field; sunbursts are at what is thought to be the stratigraphic location of hydrocarbon shows in 934–29R.





### **NEW PROPRIETARY STUDIES**

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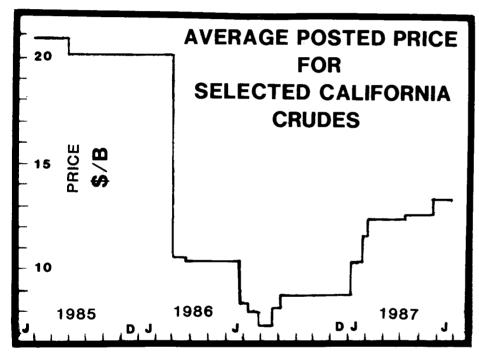
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### Time To Look Back And Take Stock

Two issues (Oct./Nov. '85 & Feb./Mar. '86) of this newsletter featured tables showing the UNOCAL posted prices for thirteen selected California crudes. These were part of articles documenting the onset of the recent petroleum industry depression.

Now two years later it seems appropriate to look back at the recent price decline and take stock. Accordingly averages of every UNOCAL posted price, for the same selected crudes, since June 1985 are graphically shown on figure 1. This clearly illustrates the precipitous price drop of March 1986, and the one-month-long low of \$7.33/Bbl during August 1986. Also shown is the unbroken, if not steady, post-August rise which has recovered more than 40% of the March decline.



The prices (\$/Bbl.) shown above were determined by taking the mean of the UNOCAL posted price for the 13 crudes tabulated in the articles appearing in the PPG for October/ November, 1985 and February/March, 1986. Each horizontal line represents the average posted price for a period equal to its length, and each vertical line represents the change in APP occurring at that point in time.

This upward trend, which mirrors rises around the world in the price of benchmark crudes, has not gone unnoticed by the industry. For example: in California the Baker Hughes rig count is up more than 50% over 1986, the attendance and exhibitor participation at the 1987 Annual AAPG Convention were both up (see story on page 3 of this issue,) from 1986, the classified advertisements in the Bakersfield paper have carried want ads for rig hands continuously for the last month and one ad for a mud logging geologist to work in the Ventura area has run for the last two weeks, plus a local radio station ran a public service spot for the Employment Development Dept. seeking a "reservoir evaluation petroleum geologist"!

Certainly the depressed state of our industry, initiated by the 1986 price drop, is not over, but recovery does appear to be under way. A return to an average posted price for California crudes of \$20/BBI. now seems possible by 1990. In fact some industry pundits are predicting \$60/BbI by the turn of the century. For the present, geologists must strive to continue to increase our industry's finding and recovery efficiency with all the tools and tricks hard times have shown us we need.

### **Dibblee Foundation Dinner**

The Thomas Wilson Dibblee, Jr., Geological Foundation sponsored "A Dinner with Thomas Dibblee" on June 12, 1987, at the beautiful Fess Parker Red Lion Resort Hotel in Santa Barbara. The \$100 per plate event was held to honor Tom and raise funds for the continuing project of publishing his voluminous mapping which is not yet in print. There were 300 of Tom's friends in attendance. The master of ceremonies was Bob Killman, Assistant to the Secretary of the Interior. Arthur O. Spaulding, President of the Foundation, spoke on "The Foundation from Dream to Reality." A very entertaining and informative keynote address was given by Alexei A. Alexandrov, Co-Director, Institute of Geology and Geophysics, Siberian Branch, U.S.S.R., Novosibirsk.

There were a number of presentations made to Tom including a letter from President Reagan, plaques and proclamations from the U.S. Congress and California State Legislature, the city and county of Santa Barbara, and Stanford University. Tom's remarks included humor, love, sincerity, and gratitude for the evening.

Tom Dibblee graduated from Stanford University in 1936 with a degree in geology and has been field mapping ever since. He has mapped nearly 40,000 square miles of California — an area equal to about one-fourth of the state. His writings include 60 geologic reports, 16 abstracts, and several non-technical articles. Over 60 of his maps are published and over 100 await publication — all on California.

The Foundation was founded in 1983 as a tax-exempt non-profit organization. A fundraising goal of \$400,000 was set to publish 100 of Tom's maps of Santa Barbara and Ventura counties. In three short years, the foundation has achieved one-fourth of its overall goal from corporate and individual donors. The Pacific Section made a \$30,000 initial financial grant to the Foundation in 1984. The Foundation is now seeking the remaining \$300,000 to continue its work.

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### **Readers Corner**

EARTH SCIENCE, summer 1986, vol. 39, GEOTIMES, vol. 31, no. 8, August 1986 no. 2

Geothermal energy.

Beyond the ice sheet, by Patricia Barnes-Svarney.

Volcano trial, by Jane Cullen Tanaka.

America's new frontier.

CALIFORNIA GEOLOGY, vol. 39, no. 10, October 1986 (California Division of Mines & Geology)

Oil Pioneering in the Golden State, by David Holstrom.

GEOLOGY, vol. 14, no. 9, September 1986.

Changing concepts of geologic structure and the problem of siting nuclear reactors: Examples from Washington State, by R. W. Tabor.

Effect of steeper Archean geothermal gradient on geochemistry of subductionzone magmas, by H. Martin

Submarine slope angles, drowning unconformities, and self-erosion of limestone escarpments, by W. Schlager and O. Camber.

Sedimentation and subsidence history of the East Mariana Basin, western Pacific by J. M. Whitman.

Paleocurrent evidence for lateral displacement of the Pliocene Colorado River delta by the San Andreas fault system, southern California, by C. D. Winker and S. M. Kidwell

Terrane motion by strike-slip faulting of forearc slivers, by R. D. Jarrard.

GEOLOGY, vol. 14, no. 11, November

Crustal structure from three-dimensional gravity modeling of a metamorphic core complex: A model for uplift, Santa Catalina-Rincon mountains, Arizona, by William E. Holt, Clement G. Chase and Terry C. Wallace.

GEOTIMES, vol. 31, no. 9, September 1986 Black shales in ocean targeted for drilling, by Philip A. Meyers and Michael A. Arthur.

Hole into basement to explore Earth's crust, by J. James Eidel, Joyce K. Frost and Jonathan H. Goodwin.

Finding ore with map, lab, computer, by Glenn H. Allcott and Charles G. Cunningham.

People, history tell how sea level changes, by David E. Lin.

GEOTIMES, vol. 31, no. 12, December 1986

E.E.Z. map have waste-disposal options, by Frank T. Manheim and Ally Vine.

Using geosciences info as a resource, by G. N. Rassam.

GEOLOGICAL SOCIETY OF AMERICAN BULLETIN, vol. 97, no. 11, November

Origin of planetary wrinkle ridges based on the study of terrestrial analogs, by J. B. Plescia and M. P. Golombek.

Regional correlation of Grande Ronde Basalt Flows, Columbia River Basalt Group, Wasington, Oregon, and Idaho, by Margaret T. Mangon, Thomas L. Wright, Donald A. Swanson and Gary R. Byerly.

Petroleum Formation and Occurrence, by B. P. Tissot and D. H. Welte (1984), 2nd edition. 699 p. Springer-Verlag, \$44.50. "They (the authors) indeed have bridged the gap (between geologists active in practical exploration, and researchers more involved in chemical oriented laboratory work). In frontier province exploration, geochemistry as a tool is now required to sell play concept for both majors and independents," - Edward A. Beaument, AAPG Reviewer.

The Sugar Creek Saga, Chronicles of a Petroleum Geologist, by Harold W. Scott (1986). 308 P. Cushing-Malloy Inc. Price \$20.00.

Rocks in Her Head, by "fifteen women who followed their husbands 'to the ends of the earth'." Siwash Enterprises, 221 Wild Oak Lake, Dallas, TX 75065. Price \$9.50 (shipping included). NOTE 1/4 of the profits from this book will be donated to AAPG.

Collison Tectonics, edited by M. P. Coward and A. C. Ries (1986). Geological Society of London Special Publications 19. 415 p. Price \$80.00 from Blackwell Scientific Publications, Inc., 667 Lytton Ave., Palo Alto, CA 94301.

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**PPG DEADLINE** for JUNE/JULY ISSUE JULY 30

NEWSLETTER Pacific Section A.A.P.G. P.O. Box 1072 Bakersfield, California 93302

**FIRST CLASS** 



# PACIFIC PETROLEUM GEOLOGIST NEWSLETTER

of the Pacific Section
American Association of Petroleum Geologists

JUNE/JULY 1987 NO. 4

### President's Corner . . .

I have had the privilege this past term to have served with Mr. Bob Lindblom and the rest of the Pacific Section A.A.P.G. Executive Committee. I would like to congratulate our newly elected officers for 1987-88 and thank those who ran as their opposition.

One of Bob's desires during his term was to help our members during trying times in our industry. I was directly involved through the Pacific Section in putting together the "Alternative Career Seminar" held last March at the College of the Canyons in Valencia which was very successful. It is my intention to continue with Bob's plan and through the Pacific Section direct our attention towards helping our membership during this continued depression in the pretroleum industry.

On behalf of the Pacific Section, I would like to take this opportunity to publicly congratulate Mr. Bud Reid for the outstanding job he and his committee did on the National A.A.P.G. Convention recently held in Los Angeles.

Jack Cunningham is the 1988 Convention Chairman and is well on his way towards making this an outstanding event. I had the opportunity to accompany the Convention Committee on a tour through the Red Lion Inn facility in Santa Barbara. Based on the facility, planned field trips, the theme: "Back to the Future", and the planned program, it promises to be an excellent convention. Hope to see you there, April 17 to 19, 1988.

DAN E. PASQUINI

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PPG DEADLINE for AUG./SEPT. ISSUE SEPTEMBER 30

### **POCS Reserve Estimate Revised**

The U.S. Department of the Interior Mineral Management Service (MMS) has issued its annual update of oil and gas reserves for the Pacific Outer Continental Shelf (POCS) in MMS 87-0045.

This report, authored by Pacific Section members Peter J. Raftery and Steven A. Wolfson, supersedes MMS 86-0066 published last year by the same authors. The POCS oil and gas reserves, as of December 31, 1986, are estimated to be 1,302 million barrels and 2,135 billion cubic feet respectively. This represents an increase from the 1985 estimates of 43 million barrels and 68 billion cubic feet. These reserves are attributed to 24 fields. Those fields that cover both State and Federal lands have reserves estimated for only the Federal portions, seaward of the 3-geographical-mile line. Ultimate production, formerly called "original reserves", from these fields is estimated at 1,670 MMBbls of oil and 2,461 BCF of gas.

The estimates for both reserves and ultimate production are higher than the corresponding estimates for Dec. 1985. Several estimates of ultimate production for individual fields were refined as development drilling continued to delineate the fields.

As of December 31, 1986, 24 fields in the

POCS are recognized by MMS as producing or capable of production. Two of these are gas fields, 14 are oil fields, and 8 are combination oil and gas. Five producing oil and gas fields, Hondo, Dos Cuadras, Santa Clara, Hueneme, and Beta are undergoing fluid injection, and recovery beyond primary production is anticipated. One field, Hondo, is under gas injection, three fields, Santa Clara, Hueneme, and Beta, are being water flooded, and one field, Dos Cuadras, is undergoing polymer injection.

Four POCS fields, Dos Cuadras, Carpinteria Offshore, Pitas Point and Hueneme, are reported by MMS to have completed their drilling programs. However, additional exploratory and delineation drilling is anticipated in many of the remaining fields to further define productive limits and promote effective development. Several fields like Point Pedernales, which commenced production in the second quarter of 1987, are expected to commence production in the near future.

Additional copies of OCS report MMS 87-0045 may be obtained from: United States Department of the Interior Minerals Management Service, Pacific OCS Region,1340 West Sixth Street, Los Angeles, CA 90017; Attn: Public Affairs (213) 894-2062.

	Oil (MMBBL)	Gas (BCF)
Ultimate production:		
Estimated as of 12/31/86 (MMS 87-0045)	1,670	2,461
Estimated as of 12/31/85 (MMS 86-0066)	1,599	2,334
Change	+71	+127
Cumulative production:		
Through 1986	369	326
Through 1985	340	267
Demonstrated reserves:		
Estimated as of 12/31/86 (MMS 87-0045)	1,302	2,135
Estimated as of 12/31/85 (MMS 86-0066)	1,259	2,067
Change	+43	+68

**Table 1.** Estimated demonstrated oil and gas reserves for 24 fields, Pacific OCS, December 31, 1986 ("Oil" includes crude oil, condensate, and gas-plant products sold; "Gas" includes both associated and nonassociated dry gas).

### **MEMORIAL**

CYRIL VAUGHN BIRD, passed away unexpectedly on June 7, 1987, of a heart attack while watching TV in his home in La Palma, California.

Cy, as he was known by his many friends, was born on September 30, 1929, in Mendon, Utah. His parents were Cyril Bird and Blanche Sorenson Bird. Cy attended grammar school in Mendon but during his high school days his parents moved to Long Beach, California, where Cy was graduated from Polytechnic High School in 1947. From 1947 to 1949 he attended Utah State University in Logan, Utah. Returning to Long Beach, California, he met Yvonne Britton and they were married in November 1950. For the next two years the advancement of his career and his married life were interrupted by service in the U. S. Army Signal Corps in Korea. Returning from the army, Cy entered U.C.L.A. where he received his B.A. in geology in 1956.

His career in the petroleum industry began in the fall of 1956 with the Humble Oil and Refining Company in Los Angeles, California. His first assignment concerned exploration geology in the Santa Barbara Channel and San Joaquin Valley. During this period he was active with the A.P.I. West Coast Reserves Committee and with the West Coast A.A.P.G. Classification and Nomenclature Committee.

In 1960 he was transferred to Bakersfield, California, where his assignments with Humble still concerned exploration geology, mainly in the "Bakersfield Arch" area. In mid-1965 he became Humble's District Production Geologist for the gas fields of San Joaquin and Santa Maria Basins but primarily in the northern Sacramento Basin.

When the district office in Bakersfield was closed in 1967, Cy was transferred to Humble's Long Beach office. Cy left Humble Oil and Refining Company in 1971 to try his hand in real estate. A brief stint as a real estate salesman convinced Cy that his true love was petroleum geology and fortunately for the U.S. Geological Survey, he joined the Conservation Division's district office in Los Angeles as a geologist in 1973. There his experience was utilized in various ways — tract evaluation for offshore lease sales, oil and gas reserve estimates, unitization agreements, lease development plans, etc.

In 1982 the Conservation Division of the U.S. Geological Survey was reorganized and the Los Angeles District office was placed in a new Federal agency, the Minerals Management Service. In this new Federal agency Cy became the Regional Supervisor of the Office of Resource Evaluation, in charge of approximately 45 professional, technical, and clerical employees. He held this position until his untimely death in June of this year.

In his younger days, Cy's hobbies were fishing and skiing, but his real attachment was to his family. He enjoyed playing the piano and working in his garden, and on weekends he loved to barbecue for family and friends.

Those of us lucky enough to have been among his associates remember Cy as a thorough and very capable geologist but also a friend, always accessible and ready to help when needed. He will be long remembered by a multitude of friends.

Cy is survived by two daughters, Valerie Bruner and Deborah Chavez, three grandchildren, Christopher and Amanda Bruner and Brian Chavez, his mother, Blanche Bird, and a sister, Ladene Damewood. His wife, Yvonne, passed away in 1980

Frank L. Webster Keith A. Yenne



### **NEW PROPRIETARY STUDIES**

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### Elk Hills 934-29R Reaches TD

The Elk Hills deep test has gone as deep as it is going to go.

Now, preparations are being made to evaluate potential pay zones encountered during the course of the record-breaking drilling job.

At total depth of 24,426 feet, the exploratory well in the western portion of the Naval Petroleum Reserve No. 1 is 1,715 feet deeper than any of the approximately 150,000 wells drilled in California since the first oil well was put down in Humboldt County in 1861.

The Department of Energy with Bechtel Petroleum as operator and Parker Drilling Co. as drilling contractor spudded in on May 30, 1985, to drill the well which is designated as No. 934-29R. The drill site on Sec. 29, 30S-23E, five miles east of McKittrick, since has been the scene of continuous, round-the-clock action.

The program now calls for plugging back to about 22,400 feet preparatory to running 7¾-inch liner from the shoe of 10¾-inch casing cemented at 17,400 feet to the top of the plug. The next step will be to drill out the plug and run slotted 5-inch liner from the shoe of the 7¾-inch liner to bottom. After liner has been run, the bottom portion of the well will be tested.

If the deepest portion of the well fails to show commercial potential, plans call for coming back up the hole to evaluate additional potential pays. If deep shows don't prove commercial, the well will be plugged back to about 9,000 feet for completion in the Carneros zone, which is a proved pay in the Elk Hills field.

The Department of Energy drilled the deep well in search for deeper production in the Elk Hills field, which is blanketed by NPR-1. The field was discovered in 1919, and while it has produced about 830 million barrels out of more than one billion barrels of recoverable oil it originally contained, most of the oil has been found at depths above 9,000 feet, with only a small amount found below that depth and none below 12,000 feet.

If the well does come through with deep production, it's anticipated that it's apt to be gas and condensate rather than black oil. The bottom hole temperature has been calculated at approximately 465 degrees Fahrenheit, which would seem to rule out a black oil find.

A deep discovery could complicate the proposal made last year by the Reagan administration to sell the Elk Hills reserve. The field's known pools largely have been delineated, but a deeper discovery could provide an unknown that might require years to fully explore, making it difficult for either the federal government or a prospective purchaser to know what a fair price might be.

A discovery at depth also could have significant implications for other Kern County oil fields. The drill site for the Elk Hills ven(Continued on page 5)

### SAN JOAQUIN GEOLOGICAL SOCIETY

# "TECTONICS, SEDIMENTATION AND EVOLUTION OF THE EEL RIVER AND ASSOCIATED COASTAL BASINS OF NORTHERN CALIFORNIA"

October 12 & 13, 1987
Dore' Theater
California State College, Bakersfield

### TENTATIVE SPEAKERS FOR EEL RIVER SYMPOSIUM

Tor H. Nilsen (Applied Earth Technology)  — Introduction  — Sedimentation in Neogene Basins of Northern California  Ed Horan and Thomas E. Hopps (Rancho Energy Exploration)  — Exploration Potential, Onshore Northern California  Jon D. Parker (Texaco, U.S.A.)  — Geology of the Tompkins Hill Gas Field, Humboldt County, California  Michael B. Underwood (University of Missouri)  — Thermal Maturation of Franciscan Terranes Near Cape Mendecino: Accretionary Basement to the Eel River Basin  James C. Ingle (Stanford University)  — Depositional, tectonic, and Paleo-oceanographic History of the Humboldt, Pt. Arena, and Pt. Reyes Basins of Northern California; A Summary of Stratigraphic Evidence  Hans Nelson (U.S.G.S.)  — Sedimentology and Stratigraphy of the Astoria Fan, An Elongate Deep-Sea Fan Filling A Trench  Steven B. Bachman and James Crouch (Crouch, Bachman, and Associates, Inc.)  — Exploration Potential, Offshore Eel River and Point Arena Basins	Gary A. Carver (Humboldt State University)  — Quaternary Tectonics of the Eel River Basin Region, Coastal Northern California  Angela S. Jayko (U.S.G.S.)  — Geologic Terranes of Coastal Northern California and Southern Oregon  Fredrick L. White or Steve Alcorn (M.M.S.)  — OCS Lease Sale 91, A Progress Review on Outer Continental Shelf Oil and Gas Leasing, Offshore Northern California  David E. Drake (U.S.G.S.)  — Morphology and Growth History of Delgada Fan: Implications for the Neogene Evolution of Point Arena Basin and the Mendocino Triple Junction  David C. Engebretson (Western Washington University)  — Cenozoic Plate Tectonic Framework of Northern California  Samuel H. Clarke, Jr. (U.S.G.S.)  — Late Cenozoic Geology and Structure of the Onshore-Offshore Eel River Basin, Northern California  David S. McCulloch (U.S.G.S.)  — The Vizcaino Block South of the Mendocino Triple Junction  M. E. Field (U.S.G.S.)  — A GLORIA View of Offshore Eel River Basin  — Evidence of Hydrocarbons and Hydrocarbon Seeps in Offshore Eel River Basin
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## LOS ANGELES BASIN

## **GEOLOGICAL SOCIETY**

## 1987 ANNUAL FIELD TRIP

What:	Weekend	field	trip	with	bus	transportation,	guide	books,	box	lunches	and	Saturday	evening
	dinner wit	th tech	nnica	l pres	entat	ion by Messrs.	Link an	d Dible	e incl	uded in r	egist	ration fee.	

Who: Marty Link, Mobil Research and Development Corporation Tom Diblee, formerly of USGS.

When: October 17 and 18, 1987.

Where: DAY 1: Meet at 6:45 AM Oxnard Hilton, 600 Esplande Dr. (805) 485-9666. Depart 7:00 AM for Wheeler Gorge, Santa Ynez Fault, Matilija Overturn, etc. with observation of Upper Cretaceous through Oligocene stratagraphic sections. Dinner meeting, Hilton Garden Room with technical presentation.

DAY 2: Depart Hilton 7:00 AM for Carpinteria with coastal traverse to Pt Mugu observing producing anticlinal structures, oil seeps, Malibu Fault, with Miocene through Pleistocene section. Return to Hilton by 4:00 PM.

Why: For a mere \$125.00 you will experience the coastal section brilliantly described by industry authorities while interfacing with your professional peers. Questions, Mike Mitchell (213) 698-0081 or Mike Mulhearn (805) 653-1579.

How: Fill out forms below and mail accordingly with check or money order. A block of rooms are reserved at the Hilton for \$49.00 per night, single or double. Individuals are responsible for hotel reservations.

Field Trip Registration Form	OXNARD HILTON INN  OXNARD HILTON INN  OXNARD CA 930300 (1805) 485 9666				
Company	Oct 17 - 18, 1987				
Address	GROUP NAME LOS ANGELES BASIN GEOLOGIC SOCIETY				
Phone	CITY				
Number attending ×\$125.00 = Make checks payable to LABGS Mail by Sept. 20, 1987 to:	PHONE NUMBER				
Mike Mitchell	CREDIT CARD #EXPIRATION DATE				
Petroleum Testing Service	First night deposit required or credit card number to guarantee reservation				
12051 Rivera Road	LAST NAME FIRST NAME ARRIVAL DATE DEPARTURE DATE				
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### (Continued from page 2

ture lies within a few miles of the Midway-Sunset field, which is another billion-barrel field. It's also near the giant McKittrick, Cymric and Buena Vista fields and not much farther from the billion-barrel South Belridge field.

By BILL RINTOUL

## Pacific Section Directory Up-Date

The executive board of the Pacific Section has authorized an up-dating of the AAPG, SEPM and SEG membership directory. The work is planned to be finished in time for the 1988 annual meeting in Santa Barbara. The up-date will be based upon the membership as of January 1, 1988. If you have moved since joining or wish to have a more recent photograph in the directory, send same to: Betty Bean, Membership Secretary, P.O. Box 1072, Bakersfield, CA 93302.



The SJGS will host its annual fall BBQ, Golf, and Tennis tournament Friday, September 11, 1987.

### **BBQ**

The BBQ will be held at the Kern River Picnic Area (East of Lake Ming). Attitude adjustment, horse shoes, and volleyball start at 5 PM, dinner at 6 PM. Tickets are \$12 prepaid or \$14 at the gate. Prepayment should be made to SJGS BBQ at P.O. Box 1056, Bakersfield, CA 93302. For additional information call Frank Cressy at (805) 323-6828.

### GOLF TOURNAMENT

This years tournament will be held at the North Kern Golf Course (off Lerdo Hwy. between Hwys. 99 & 65). The entrance fee, which includes lunch, drinks, and prizes, is \$13.00 per person. (Carts are extra!) Send your entrance fee, names of your foursome (if you wish to play with a particular group of friends), and your phone number (for starting times) to: SJGS Golf, P.O. Box 1056, Bakersfield, CA 93302, before the September 4 sign-up deadline. First tee off will be 8 AM. For additional information call either Ray Washa or Gerry Conroy (Welex) at (805) 833-1952.

### TENNIS TOURNAMENT

The Round Robin Doubles formatted ten-

nis tournament will be held at the Rio Bravo Tennis Club (off Alfred Harrell Hwy. east of Bakersfield). Check-in time is 8:30 AM, play starts at 9 sharp, lunch 12-1, finish play at 3 PM. Entrance fee is \$15.00 per person, and includes lunch, drinks, and prizes. (Lockers and shower facilities are available). Send your entrance fee to: SJGS Tennis, P.O. Box 1056, Bakersfield, CA 93302, before the Friday, September 4, 1987 deadline. For additional information call Buzz Delano (ResTech) at (805) 325-3987.

# Northwest

### **Quarterly Meeting**

The Northwest Petroleum Association will hold its quarterly meeting September 10, in room 252 of the Olympia Westwater Inn, Olympia, Washington. The meeting opens at 11:30 AM with cocktails, lunch at Noon, presentation of the Kyle Huber Award at 12:45, and Prudential-Bache presentation at 1 PM. Please RSVP to Onita King (503) 226-4211, ext. 3590 by **September 4**.

Terry Mitchell, Carabon River Energy Partnership, hs been selected as this year's recipient of the Kyle Huber Award. This award is presented annually by the Association to that person determined to have made "the most significant contribution to energy development in the Northwest." Terry will receive the award in recognition of his work on the development of coal methane properties in Washington.

The Prudential-Bache Securities, Inc. presentation is entitled "The Changing State of the Energy Environment – An Industry Overview".

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## Reader's Corner AAPG BULLETIN

vol. 71, no. 4, April 1987

Oriented core: Its use, error, and uncertainty, by R. A. Nelson, L. C. Lenox and B. J. Ward, Jr.

Nicolas and Eel Submarine Fans, California Continental Borderland, by Suzanne Reynolds and Donn S. Gorsline.

vol. 71, no. 6, June 1987

Assessing the relative importance of compaction processes and cementation to reduction of porosity in sandstones, by David W. Houseknecht.

Analysis of hydrodynamic factors in petroleum migration and entrapment, by Richard W. Davis.

## GEOLOGICAL SOCIETY OF AMERICA BULLETIN

vol. 98, no. 4, April 1987

Evolution of an ophiolitic tectonic melange, Marble Mountains, northern California Klamath Mountains, by Mary M. Donato.

Crustal structure of the Basin and Range-Sierra Nevada Transition from COCORP deep seismic-reflection profiling, by P. L. K. Knuepper, P. J. Lemiszki, T. A. Hauge, L. D. Brown, S. Kaufman, and J. E. Oliver.

vol. 98, no. 5, May 1987

Implications of the northwestwardly younger age of the volcanic rocks of west-central California: Alternative Interpretation, by Richard G. Stanley.

Structure of the Havallah sequence, Golconda allochthon, Nevada: Evidence for prolonged evolution in an accretionary prism: Discussion and reply.

vol. 98, no. 6, June 1987

Tectonics and alluvial sedimentation of the upper Oligocene/lower Miocene Vasquez Formation, Soledad basin, southern California, by Eric D. Hendrix and Raymond V. Ingersoll.

The Huntzinger flow: Evidence of surface mixing of the Columbia River Basalt and its petrogenetic implications, by Stephen P. Reidel and Karl R. Fecht.

### **GEOLOGY**

vol. 15, no. 5, May 1987

Stratigraphic, sedimentologic, and petrologic record of late Miocene subsidence of the central Oregon High Cascades, by Gary A. Smith, Lawrence W. Snee and Edward M. Taylor.

SEM analysis of weathered grains: Pretreatment effects, by D. L. Cremeens, R. G. Darmody, and I. J. Jansen.

Late Quaternary caldera-forming eruptions in the eastern Aleutian arc, Alaska, by Thomas P. Miller and Robert L. Smith

Late Cretaceous to early Tertiary ductile deformation: Catalina-Rincon metamorphic core complex, southeastern Arizona, by Ann Bykerk-Kauffman, and Susanne U. Janecke.

vol. 15, no. 6, June 1987

Wear and gouge formation in brittle faulting, by Christopher H. Scholz.

Depths and water content of magma chambers in the Aleutian and Mariana island arcs, by Don R. Baker.

Influences of eolian and pedogenic processes on the origin and evolution of desert pavements, by Leslie D. McFadden, Stephen G. Wells, and Michael J. Jercinovich.

Post-Nevadan deformation along the Bear Mountains fault zone: Implications for the Foothills terrane, Central Sierra

(Continued on page 6)

- (Continued from page 5)
  - Nevada, California, by Scott R. Paterson, Othmar T. Tobisch and Judith K. Radloff.
- Inferences on sediment strength and fault friction from structures at the Aleutian Trench, by Dan M. Davis and Roland von Huene.
- Isotopic hetrogeneity in a tilted plutonic system, Klamath Mountains, California, by Calvin G. Barnes, Charlotte M. Allen and Robert H. Brigham.
- Crustal subdivisions of the eastern and central United States and a seismic boundary hypothesis for eastern seismicity, by Robert D. Hatcher, Jr., Isadore Zietz and Joe J. Litehiser.
- Problems of recognition of olistostromes: An example from the lower Pit Formation, Eastern Klamath Mountains, California, by Christopher J. Eastoe, Michael M. Gustin and Stephen E. Nelson.
- Internal textures of rhyolite flows as revealed by research drilling, by Curtis R. Manley and Jonathan H. Fink.
- Structural and geochemical constraints on the reassembly of disrupted mid-Miocene volcanoes in the Lake Mead-Eldorado Valley area of southern Nevada, by Michael E. Weber and Eugene I. Smith.
- Cretaceous age of the upper part of the McCoy Mountains Formation, south-eastern California and southwestern Arizona, and its tectonic significance: Reconciliation of paleobotanical and paleomagnetic evidence, by Paul Stone, Virginia M. Page, Warren Hamilton, and Keith A. Howard.

### U. S. GEOLOGICAL SURVEY

- Professional Paper 1350: Volcanism in Hawaii, edited by R. W. Decker, T. L. Wright and P. H. Stauffer (2 volumes) (Hard bound) \$95.00
- Professional Paper 1338: Effects of organic wastes on water quality from processing of oil shale from the Green River Formation, Colorado, Utah and Wyoming, by J. S. Leenheet and Y. Il Noyed \$3.50

- P 1396-C: Magnitude and frequency of debris flows and areas of hazard on Mount Shasta, Northern California, by W. R. Osterkamp, C. R. Hupp, and J. C. Blodgett \$6.00
- Bulletin 1590-A: Soils developed in granitic alluvium near Merced, California, by J. W. Harden \$3.50
- B 1639: The Morgan Hill, California, earthquake of April 24, 1984, edited by S. N. Hoose, (supersedes OF reports 84-498-A,B) \$9.50
- Circular 953: Proceedings of the Advanced seminar on sedimentation, August 15-19, 1983, Denver, Colorado, edited by G. D. Glysson (Supersedes OF 85-98)
- Circular 986: The Alaska Mineral Resources
  Assessment Program: Background information to accompany folio of geologic and mineral resurce maps of the Circle Quadrangle, Alaska, by H. L. Foster, W. D. Menzie, J. W. Cady, S. L. Simpson, J. N. Aleinikoff, F. H. Wilson, and R. B. Tripp.
- Circular 995: USGS research on mineral resources, 1987; program and abstracts, edited by J. S. Sachs. Free

### **MAPS**

- I-1257-G: Map showing liquefaction susceptibility of San Mateo County, California, by T. L. Youd and J. B. Perkins; (Scale 1:62,500). \$3.10
- I-1257-H: Map showing predicted seismicshaking intensities of an earthquake in San Mateo County, California, comparable in magnitude to the 1906 San Francisco earthquake, by J. M. Thompson and J. F. Evernden (1:62,500). \$3.10
- I-1776: Oblique map of Yosemite National Park, central Sierra Nevada, California, by T. R. Alpha, N. K. Huber, and Clyde Wahrhaftig (Available unfolded only.). \$3.10

### SCIENCE

Vol 234, no. 4781, Pg. 1169, Dec. 5, 1986 Energy Future by Philip H. Abelson.

Vol. 236, no. 4809, Pg. 1631-1636, June 26, 1987

Can the U.S. Oil and Gas Resource Base Support Sustained Production by William L. Fisher.

#### **BOOKS**

- Atlas of Selected Oil and Gas Reservoir Rocks From North America by Edwin W. Biederman, Jr. (1986). 399p. John Wiley and Sons, \$125.
- Cenozoic Basin Development of Coastal California edited by Raymond V. Ingersoll and W. G. Ernst (1987). 496p. Prentice-Hall, Inc., \$64.
- The Miocene Ocean: Paleoceanography and Biogeography, edited by J. P. Kennett (1985). GSA Memoir 163. 337p. \$42.

Lucy Birdsall

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PUBLICATIONS COMMITTEE: Pacific Section American Association of Petroleum Geologists, P.O. Box 631, Ventura, CA 93002.

NEWSLETTER
Pacific Section A.A.P.G.
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Bakersfield, California 93302

FIRST CLASS

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# PACIFIC PETROLEUM GEOLOGIST NEWSLETTER

of the Pacific Section
American Association of Petroleum Geologists

AUGUST/SEPTEMBER 1987 NO. 5

### President's Corner . . .

Since our last edition of the *PPG* there has been a considerable amount of convention news. The Pacific Section received a check for \$1,964 for its share of the net proceeds from the 1987 National Convention held in Los Angeles recently.

Preparations for the 1988 convention to be held in Santa Barbara at the Red Lion Resort, April 17th through the 19th, are on schedule. The programs promise to be excellent, with several interesting offshore papers on tap. It is reported that the S.E.G. and S.E.P.M. symposiums are coming along well and we can anticipate normal good quality programs. Also included will be the participation of the SPWLA who is planning a half day well logging symposium. Additionally, several short courses are slated with two field trips scheduled in the Ventura Basin and the Cuyama Basin.

For 1989 I am pleased to announce that for the first time, Pacific Section will hold its Annual Convention in Palm Springs. The scheduled dates are Wednesday, May 10th, through Saturday, May 13th. Mike Mitchell of Petroleum Testing Service, who is currently the president of the L.A. Basin Geological Society, has agreed to be the General Chairman. The convention will be held at the Palm Springs Convention Center and the headquarters hotels will be the Spa Hotel and Mineral Springs, and the soon to be completed New Wyndham Hotel.

Finally, for those who are not aware, the 1990 National AAPG Convention will be held in San Francisco, the site of the largest attended AAPG Convention. Make your reservations early.

Our Past President, Bob Lindblom, is heading up a committee for the purpose of following up on the "Alternative Career Seminar" held last March. Bob will be researching the results of the last seminar and will plan a sequel accordingly.

I was able to attend the San Joaquin Geological Society/Oil Scouts Annual Fall Pienic held at the Kern River pienic grounds on Friday, September 11th. We all had a great time and the food, the company and the tournaments were great!

Our next Executive Committee meeting is scheduled for November in Los Angeles on

(Continued on page 3)

### CORE REPOSITORY GETS HELPING HAND

The California Well Sample Repository has received a microfiche well data system from Cities Service Oil and Gas Corporation, a subsidiary of Occidental Petroleum Corporation. The donated M.J. System, which is current through 1983, filled ten cardboard boxes and will be used to supplement the sample material available at the repository.

Following Cities donation, Pepper-Kittridge Exploration of Sacramento donated a microfiche reader. Additional readers have been promised by Castle Minerals of Isleton. However, use of the system is currently hampered by a lack of a printer!

Since its founding, in July 1975, project Director Dr. John R. COASH, and others on the Advisory Board have envisioned a facility with binocular and petrographic microscopes, cameras, ultra-violet lights, and other examination and processing equipment available for use at the Repository. Unfortunately, as generous as the founding grants and donations were, they fell short, by almost half, of providing the funds necessary to fullfill this vision. "Right now," says curator Larry KNAUER, "we have to increase our endowment to the \$500,000 level in order to obtain sufficient annual operating funds to make the Repository an effective facility. For example, \$5200 would fund one student assistant @ 20 hours/week for one year to help to remove the cataloging backlog of core from more than 1000 wells. Four thousand dollars would buy a bank of steel shelves, so we could get core boxes off pallets and into circulation." Of critical importance says KNAUER is the need to earthquake proof the existing shelving. "Imagine what this place would look like after a magnitude 7 or 8 on the San Andreas west of here? Core spilled from its boxes would be impossible to return to the proper box. Much of our core comes from areas where coring is unlikely to occur in the future, that's what would make the loss of irretrivable basic geologic data so tragic.'

Another deficiency the Repository has is the lack of a users' workroom. Presently the only place available for users is in the aisles of the warehouse. This is cramped, poorly lighted, and not airconditioned, in short totally inadequate for good geologic study.



RECENT DONATIONS — Larry Knauer, curator of the California Well Sample Repository holds a tray of microfiche from the M.J. System files donated by Cities Service Oil & Gas Corp. Boxes on the table to his left hold additional trays of this donation. Partially visible below the displayed tray is the microfiche reader donated by Pepper-Kitredge Exploration.

(Continued on page 2)

(Continued from page 1)

Summing up the bottom line KNAUER says "I guess that a shopping list of the things we need to make the Repository the effective tool the founders wanted and today's geologists needs would read like this:

Shelving and seismic safety bracing	\$70,000
Student assistants to catalog	
donated core \$10,00	00–15,000
A users room with	
restroom facilities	\$75,000
Printer of microfiche	\$ 6,500
Computer equipment to tie	
into campus system	\$ 1,000

It's clear that the Repository is a good idea and a necessary asset to the geologic community, it's also true that geologists, the industries they work in, government, and aca-



BACKLOG — Curator Knauer stands surrounded, in the Repository's storage warehouse, by a sea of core boxes from the backlog of several thousand uncataloged cores housed by the Repository.

demia have all dug deep in the past to found and nurture this idea, but it has not been enough to complete the job. In California, where there are so many working geologists, several major industries which depend upon their work, and academic institutions with students to learn from the data housed in it, an inadequate core repository is unacceptable.

Many of the items, or parts of the items, needed could be donated used and not detract from the functioning of the Repository. So look around, if you, or your company, or the company you work for has an extra...why not donate it to this effort. To arrange for donations call: Dr. John R. COASH (805) 833-2222, Larry KNAUER (805) 833-2324, or Vic Church (805) 325-5924.

### **State Board Activities**

At its' October meeting the California Board of Registration for Geologists and Geophysicists voted to amend the rules section which prescribes the application, registration and renewal fees. This amendment will increase the initial registration and renewal fee for geologist and geophysicist from \$80 and \$100. It would also increase the renewal fee for a specialty geologist from \$10 to \$20.

Since these fees are paid biannually this amounts to an annual increase of \$10/Yr. for geologist and geophysicist and \$5/Yr. for specialty geologist.

The approved changes have been forwarded to the Office of Administrative law. Accordingly anyone wishing to comment may do so by writing to the Office at 555 Capitol Mall, Suite 1290, Sacramento, CA 95814.

On August 24, the Board re-elected Mr. Howard A. Spellman, Jr., of Arcadia, president and and Mr. Wayne Bartholomew, of Elk Grove, vice president of the State Board for 1987-88.

Mr. James R. Weddle, of Bakersfield, was appointed to the board on July 30, 1987, by Governor Deukmejian as the Petroleum Geologist member of the board. He replaces Mr. William Park who has served on the board during both Governor Reagan's and Governor Deukmejian's administration. Mr. Weddle is a member of AAPG, CIPA and past president of the Pacific Section AAPG (1983-84); a graduate of UC Berkeley (1957). His term will expire June 1, 1991.

Mr. Leo W. King of Baldwin Park, was appointed to the board on June 17, 1987, by the Senate Rules Committee. Mr. King is a registered engineer, and the Mayor of Baldwin Park.

### Petroleum Information Returns Files From Texas

The Petroleum Information Corporation log and well files shipped to Houston, in November 1986, have been returned to P.I.'s office at 4301 Stine Rd., Suite B, Bakersfield, CA 93313. Thes files include oil, gas, and geothermal well log services, drilling reports, current and historical well data in hard copy and microform, maps, lease data and microfilmed well log and production data for the West Coast region. California, Oregon and Washington onshore and offshore wells plus some Nevada information comprise the West Coast region.

The staff for the Bakersfield service center are:

Ed Miller . . . . . . . Area Manager Cheryl Mathews . . . . Log Manager Clare Barron . . . Sales Representative

The phone number at the Center is (805) 398-0551.

### **New Members**

#### COAST

Steven M. Richardson — Robert L. Richardson, Inc., Ventura; Susan Wickham, Ventura.

### LOS ANGELES

Richard G. Blake — Fleet Oil Co., Irvine; Robert J. Floran, UNOCAL, Brea; Willard J. Guy, San Diego; Gilbert M. Wilson, Alhambra.

### **SACRAMENTO**

**Susan F. Hodgson** — D.O.G., Sacramento.

### SAN JOAQUIN

Rand Cantrell — Bakersfield; Ulrich A. Franz, Mobil.

#### OTHER

William C. Booher — GTS Corp., Houston; George Dellagiarino — U.S. Mineral Management Service, Reston; Claude True — Mobil, Denver.

## Deadline For Convention Papers Extended

The Technical Program Coordinator for the 1988 Pacific Section Annual Meeting has postponed the deadline for submission of abstracts from October 1 to November 1, 1987. Back to the future is the theme for the meeting which will be held at the Santa Barbara Red Lion Inn.

Papers should be suitable for 20 minute oral presentation or poster session. Abstract forms may be obtained from the Coordinator; Tom Redin, 756 Monte Vista Ave., Ventura, CA 93003.

Notice of acceptance, along with speaker or poster kits, and presentation schedules will be mailed to the speaker's address by December 15, 1987. Abstracts accepted for the meeting will be published in the March 1988 AAPG Bulletin.

### Recent Moves

Division of Oil and Gas District 6 office from 117 West Main Street, Suite 11 to 221 West Court Street, Suite 1, both in Woodland, CA 95695.

# Northwest

The membership of the Northwest Petroleum Association (NWPA) has sent a resolution by its' Board to the Army Corps of Engineers opposing the expansion of the Yakima Firing Range.

In the resolution the Board noted that the Firing Range is "located in a geological basin which is known to have significant hydrocarbon potential and the proposed expansion will have the effect of limiting the development of this potential in the Yakima area." Also mentioned was the present depressed state of



### **NEW PROPRIETARY STUDIES**

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the petroleum industry activity and the likelihood of a reversal of this situation by future demand/shortage, making the resumption of exploration activities vital to the national security. In addition to voicing its support for the development of "the full hydrocarbon potential of the Columbia Basin" and requesting "that the proposed Firing Range expansion be withdrawn" the Board also asks that in the event expansion proceeds then the Army "conform to the Land Use Laws and Policies" to allow multiple use compatible with mineral resource development.

The NWPA Awards committee selected Terry Mitchell of Carbon River Energy Partnership as this year's recipient of the Kyle Huber Award, "For diligence in pursuing his goal to develop coal bed methane as an energy source in the Pacific Northwest."

The award is presented annually by the NWPA to that person determined to have "made the most significant contribution to energy development in the Northwest."



Alan R. Hershey
Consulting Geologist

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# Northern California

The Northern California Geological Society announces the availability of a grant of up to \$500 that is intended to support research on Northern California geology. Interested students should send a description of the research project, an itemized list of anticipated expenses, and a letter of support from the faculty advisor to: Tim McHargue, Chairman NCGS Grant Committee, COPI, P.O. Box 5046, San Ramon, CA 94583. All requests and supporting documentation must be received by February 1, 1988.

The NCGS officers for 1987-88 include:

President . . . . . . Tom Mason

Vice President . . . . . Ron Crane

President-Elect . Linda Thurn
Secretary . Jason Donchin
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Past President . Debby Hagan
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# Los Angeles

The Los Angeles Basin Geological Society has moved the location of its' regular noon meeting from Les Freres Taix to Luminaries Restaurant, 3500 Ramona Blvd., on the hill above the Monterey Park sign (eastbound on I-10, exit at Valley, turn onto Ramona; northbound on Long Beach Frwy, take Ramona exit; and westbound on I-10 take Atlantic exit, south to Garvey, west to Ramona).

### **NOVEMBER**

**Dr. Parke Snavely** on the "Tertiary stratigraphic and tectonic framework of the Oregon-Washington continental margin". Thursday, November 19, 1987.

### O.P.A.L.S. Formed

The spouses of AAPG members who manned the hospitality area at the Bonaventure Hotel during the 1987 Los Angeles Convention decided to perpetuate their camaradarie with an organization called O.P.A.L.S. (Oil Patch Associated Ladies). The organization is open to those associated with the oil industry who would like to socialize with their fellow associates. This is a purely social group, there are no "by-laws," "elected officers" or "dues."

Anyone wishing additional information should contact any of the following: Julie Hacker (818) 348-2115, Marie Hill (213) 696-3496, Dorothy Kilkenny (818) 289-2429, Ellen Sawyer (213) 287-8320.

(Continued from page 1)

a date to coincide with the Los Angeles Basin Geological Society's November luncheon meeting. Please feel free to call on any member of the Executive Committee anytime to offer your suggestions and comments. It is important that we hear your views.

DAN E. PASQUINI

### **GREEN & ASSOCIATES**

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## Energy Conference — Kern County

The Kern County Department of Planning and Development Services will host a conference on energy-related issues in Bakersfield, at the Casa Royale Motor Inn, October 30, 1987.

The "Energy Conference" will include sessions on long-term prospects for energy development, new energy resources, air quality restraints to energy development, outlook for electrical power, natural gas pipeline issues, and the role of government in regulating and facilitating energy development. The conference will involve issues of statewide as well as local concern.

Conference speakers include Congressman William Thomas, California Energy Commission Chairman Charles Imbrecht, California Energy commissioner Dr. Richard Bilas, State Assemblyman Trice Harvey, State Assemblyman Phillip Wyman, and 28 other individuals with significant expertise in all related facets of energy issues.

On Thursday, October 29, 1987, two tours will be available to conference attendees. Site Tour I will examine a major cogeneration and secondary recovery facility and a major refinery. Site Tour II will examine the Tehachapi wind farm operations.

All attendees are invited to a conference reception Thrusday evening from 6:30 p.m. to 8:30 p.m.

Should you wish additional information, please contact Planning Division Chief Ted James at (805) 861-2615.

### 62nd Wildcatters Hi-Jinks

The latest edition of the Hi-Jinks will be held at the Long Beach Petroleum Club, December 7, 1987. The events schedule is:

Attitude Adjustment . 5:30 to 7:00 PM Steak Dinner . . . 7:00 to 8:00 PM Show . . . . . . 8:30 PM

Tickets for "Down and Out in Long Beach" may be obtained from **Joe Strausky** of WOGA.

### Reader's Corner

### U. S. GEOLOGICAL SURVEY

- Professional Paper 1268: Stratigraphy and sedimentology of the Eocene Tejon Formation, western Tehachapi and San Emigdio Mountains, California, by T. H. Nilsen \$6.00
- Circular 998: Geologic studies in Alaska by the U. S. Geological Survey during 1986, edited by T. D. Hamilton and J. P. Galloway Free
- OF 86–0635: Geologic map of parts of Lopez Mountain, Santa Margarita Lake and Pozo Summit quadrangles, California, by J. G. Vedder, D. G. Howell, and Hugh McLean. 1 over-size sheet, scale 1:24,000. Microfiche \$1.50; paper \$5.25. (Order from OFSS, Denver Federal Center, 80225.)
- OF 86–9636: Geologic map of Branch Mountain quadrangle and part of Chimineas Ranch quad., California, by J. G. Vedder, D. G. Howell, Hugh McLean and J. M. Joyce. 1 over-size sheet, scale 1:24,000. Microfiche \$1.50; paper \$5.25. (Order from Denver. See above.)
- OF 86-0637: Geologic map of parts of La Panza and California Valley quadrangles, California, by J. G. Vedder, D. G. Howell and Hugh McLean. 1 over-size sheet, scale 1:24,000. Microfiche \$1.50; paper \$4.25. (Order from Denver. See above.)

### **GEOLOGY**

vol. 15, no. 7, July 1987

- History and controls of subsidence in the Late Cretaceous-Tertiary Great Valley forearc basin, California, by Ian W. Moxon and Stephen A. Graham.
- Paleomagnetic and structural evidence for middle Tertiary counterclockwise block rotation in the Dixie Valley region, west-central Nevada, by Mark R. Huson and John W. Geissman.

### GEOLOGICAL SOCIETY OF AMERICA

vol. 99, no. 1, July 1987

- Structural style and kinematics of an underplated slate belt, Kodiak and adjacent islands, Alaska, by James C. Sample and J. Casey Moore.
- Ore deposits of the western United States in relation to mass distribution in the crust and mantle, by Jan Kutiana and T. G. Hildenbrand.

vol. 99, no. 2, August 1987

- Surface processes, deposits, and development of star dunes: Dumont dune field, California, by Jamie Nielson and Gary Kocurek.
- Structural geology and accretionary history of the Northwest Cascades system, Washington and British Columbia, by E. H. Brown.
- Paleogeographic and tectonic implications of the Golconda allochthon, southern Toiyabe Range, Nevada, by H. A. Babaie.
- Field, chemical, and physical constraints on maficfelsic magma interaction in the Lamarck Grandodiorite, Sierra Nevada, California, by Thomas P. Frost and Gail A. Mahood.

### **GEOLOGY**

vol. 15, no. 8, August 1987

- Geologic constraints on the Cenozoic Antarctica-Austrailia-Pacific relative plate motion circuit, by Peter J. J. Kamp and Paul G. Fitzgerald.
- Evaluation of amino-acid racemization/ epimerization dating using radiocarbondated fossil land snails, by Glenn A. Goodfriend.
- Earthquake rupturing as a mineralizing agent in hydrothermal systems, by Richard H. Sibson.
- Bacterially mediated diagenetic origin for chert-hosted manganese deposits in the Franciscan Complex, California Coast

- Ranges, by James R. Hein and Randolph A. Koski.
- Low-angle normal-fault system along the range front of the southwestern Galiuro Mountains in southeastern Arizona, by William R. Dickinson, Thomas C. Goodlin, Jeffrey A. Grover, Roger A. Mark, and Muhammad Shafiqullah.

Isotopic age constraints on middle Paleozoic deformation in the northern Sierra Nevada, California, by Jason Saleeby, Judith L. Hannah, and Robert J. Varga.

Lucy Birdsall

PACIFIC SECTION — AMERICAN ASSOCIATION PETROLEUM GEOLOGISTS OFFICERS 1987 – 1988

 
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# PACIFIC PETROLEUM GEOLOGIST NEWSLETTER

of the Pacific Section American Association of Petroleum Geologists

DECEMBER/JANUARY 1988 NO. 1

## THE BEST OF TIMES WITH THE WILDCATTERS IN LONG BEACH

The 63rd Annual Wildcatters Hi-Jinks Show "Down and Out in Long Beach) played to a capacity audience monday night December 7th. (a date known for unusual happenings). A combination dinner and show was presented to a packed house at the Long Beach Petroleum Club. The dinner was prime rib and all the trimmings and the show was vintage ham. The genial Master of Ceremonies was **Paul Howard**. An irreverently relevant commentary was presented by **Gene Griffin**, werein messers Pickens and Halbouty were subjects of a great deal of good natured ribbing.

The Hi-Jinks lived up to its raucous ribald reputation in a series of original songs and skits. A unique quartet composed of father and son pairs (Lee and Mac McFarland, and Bob and Paul Hacker) gave a seamless performance as the Four Skin Heads, which may be the cutting edge of what could only be called Oil Punk.

A special Guest, Ibn Ben Salam, rounded out the evenings entertainment with his unique perspective of the Arab point of view. His up-to-date research and illuminating explanations of the intricacies of the national, international, and irrational relationships in the oil industry was not only timely but thought provoking.

Instead of greasing palms in Los Angeles, the major recipient of charity monies from the presentation is **Pyles Boys Camp** near Porterville. This show was extremely effective in pumping up enthusiasm for this worth while charity.

Rumor has it that perhaps Bakersfield maybe considered for a performance of the Wildcatters show to the oil folks at home.

### **NEWS OF NOTE**

Due to the mailing of membership forms by **Mike Mitchell**, there has been a quite edifying response and 63 new memberships have been received. Congratulations to Mike and the LABGS for their work. The membership forms were mailed throughout the Southern California area, the new members are distributed throughout all of the Southern California societies. Cross-sections for the L.A. Basin and Cuyama are now available, the SEPM has several field trip guide books for sale at reduced prices. Further information on the titles and prices of the publications will be published in the next news letter.

In news of interest to those interested in legislation and public affairs (just about every one) Robert Levorson was appointed District VII Chairman for the AAPG Committee on Governmental Communication for Nevada and Hawaii.

There may be a booth to update your photograph for the AAPG; SEPM; SEG Directory at the 1988 AAPG convention at Ventura more about this later.

### **FUTURE MEETINGS OF INTEREST**

FEB. 10, 11 Dr. Tom Davies will present a 1 day class in Seismic Facies Analysis of Cratonic Basins at both Bakersfield and L.A. on the respective dates.

ON JANUARY 26 a presentation of some prliminary results of the drilling at Cajon Pass will be given by Mark Zoback at the SCWLS meeting at Luminaries Restaurant in Monterey Park.

Don't forget the AAPG Annual meeting at Houston March 20-23 and our own Pacific Section meeting at Ventura April 17-19. The Cordillaran section of the GSA will meet in Las Vegas March 28-30. This years Offshore Technology Conference will be held at Houston May 2-5.

The Society of Economic Palentologists and Mineralogists announces its Fifth Annual Midyear Meeting, to be held in Columbus, Ohio, August 21-24, 1988. Walt Sweet, Department of Geology and Mineralogy, Ohio State University, will serve as general chairman of the local organizing committee. Further information, as it becomes available, can be obtained from Jeanne Couch, Meetings Coordinator, SEPM, P.O. Box 4756, Tulsa, OK 74159-0756, (918) 743-9765.

### **ELK HILLS NEWS**

The state of California filed a lawsuit against the U.S. government in an attempt to enforce the state's claim to two producing tracts in the Elk Hills Naval Petroleum Reserve. The tracts cover about 6% of the Elk Hills reserve and are valued at \$882 million. A suit was filed in a Fresno federal court, seeks a share of revenue from 877 million bbl of oil produced by the entire reserve during 1977-87. The federal revenue amounted to about \$12.i billion, California estimates. The basis of the suit stems from an interpretation of the original 1853 federal grant of the land to California to support the state's school system. California school land revenue goes to the state teachers retirement system. California took title to the land in 1903, but in 1912 the tracts were set aside for the Navy's needs. In 1976 Congress authorized production. A report prepared for the DOE recommending sale of the Elk Hills reserve characterized the property as "an income generating federal business asset", no longer an emergency source of oil for defense pecipitated

Bill Rintouil reports that the deep test at Elk Hills came to an end late last year. The T.D. was 24,426 feet, the deepest ever drilled in California. News is pending on any findings seen in the exploratory hole however. The price tag for the well is estimated at 25 million dollars making it the most expensive onshore California well. The D.O.E. and Bechtel (the operator) suspended the well after running tubing and installing a wellhead. The decision to shut in the well and release the rig came after an unsuccessful attempt to perforate an interval at about 17,100 feet for a formation test. The guns apparently wouldn't fire properly on the tubing conveyed job. A smaller rig may move in at a later date to continue the attempt to evaluate the well.

The well (No. 934-29R) was spudded May 30, 1985 in the western portion of the Elk Hills field. The deep test was to evaluate the potential for production in the field that here-to-fore has had most of its production above 9,000 feet, and none below 1200 feet. In previous testing in this well, an open-hole formation test of the 100 foot interval from 17,400 to 17,500 feet indicated a flow of gas at a rate of 791,000 cubic feet per day through a 20/64 inch choke. It was after this test that the DOE took the well down to the record depth of 24,426 feet, nearly 1,715 feet Jeeper than any other California wells.

### THE PRESIDENT'S COLUMN

I am sad to announce that **Wes Bruer** recently suffered a stroke. We have heard, however, that he is making good strides towards recovery. I would like to encourage all of his friends to drop him a note when they find time. His address is: 190 S. First Street (3), St. Helens, Oregon 97051

Wes has been a driving force in our profession and has been instrumental in achieving higher standards for the Petroleum Geologist and Geophysicist. He has just recently had to resign from the National Advisory Council of the AAPG because of his illness. This is a great loss to the National AAPG as well as the Pacific Section.

At our regular meeting held in November, the Executive Committee voted Mr. Robert Lindblom to succeed Wes and finish the remainder of his term and then continue through the next term as our representative to the National Advisory Council. Bob is the past President of the Pacific Section, employed by Chevron USA and is highly qualified for this assignment.

On a different note, Jack West who is Pacific Section's President Elect, is leading a committee to review our constitution which was last amended in April of 1976. Any recommended changes will be put up for a vote before the membership next Spring along with the slate of officers for the 1988-1989 term.

Jack Cunningham reported on the 1988 Santa Barbara Convention and all is going well. As I mentioned in my last column, it promises to be an excellent event, so please plan to attend.

Russ Robinson who has been editor of the PPG Newsletter has turned the reins over to Pat Bell. Russ has done an excellent job as editor and has volunteered to assist Pat in any way he can. We would like to welcome Pat and send out a big "Thanks" to you, Russ, from all the members of the Executive Committee.

Dan E. Pasquini December 4, 1987

# Los Angeles

Upcoming meetings will include AAPG Distinguished Lecturer Marlan Downey speaking on "Evaluating Seals for Hydrocarbon Accumulations" on December 10, Thomas Wright discussing Los Angeles Basin geology with some comments on the Whittier Fault on January 22, and Martha Withjack reviewing physical modeling of geologic structures on February 25. Meetings will continue to be at noon at Luminaria's Restaurant in Monterey Park.

### **MARTIN VAN COUVERING AWARDS**

In 1972 the Pacific Sections SEPM, SEG, and AAPG established The Martin Van Couvering Award. This award was to be given to students to enable them to attend our Annual Convention or Field Trips. In discussions with Martin Van Couvering the stated purpose of the awards developed to provide the opportunity for students to meet with working professionals and to foster a better understanding of the profession they were about to enter. This was of especial interest to Martin.

The first awards were made at the Fall SEPM Field Trip in October, 1972. It is thus most appropriate that this year's awardees also attended the fall field trips.

It is our pleasure to announce the following recipients:

Cal State Univ., Fullerton

Chris Fedo

Rob Loeffler

John Lucio

Mike Muras

Randy Ruff

Cal State Univ., Long Beach

Karen Kinsella

Bruce Perry

Cal State Univ., Northridge

Sean Connell

George Freitag

Robert Larson

Fen Yen

Saddleback College

Connie Powers

CONGRATULATIONS TO YOU ALL!!!

San Diego State Univ. Henry Legarre David Mac Connell

San Jose State Univ., Philip Johnson Kari Marchant

Molly Malone

Stanford Univ. Tom Riley

Univ. of Cal, Los Angeles Charles Lane Paul Short Mark Sutherland

Univ. of Southern Cal Kathi Beratan Lillian Roberts

Don Hallinger, Pres. elect SEPM

### **GREEN & ASSOCIATES**

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# Northwest

The Northwest section at its November 13th meeting recommended that a time y study of any relevant environmental issues be completed so that the 1992 Pacific Outer Continental Shelf Oil and Gas Mineral rights Lease Sale 132 will not be delayed. The Board of Directors resolution was read at the November meeting in Kelso.

The Washington Dept. of Natural Resources has extended filing of applications on state owned land until early in 1988. The auction has been delayed until April. Deadlines for Applications were November 20th, applications received after that date will be processed for inclusion in the next auction (at some future unlisted time). Applications should be sent to the Washington Dept. of Natural Resources, C/O Division of Lands and Minerals, Room 202, John A. Cherberg Bldg., Olympia, Wa., 98504.

### **IN MEMORIAM**

Friends of Daniel "Dan" Sullivan would be interested to know that Dan died November 17 in Houston, Texas at the age of 66. Dan worked for Continental Oil Company, starting in 1948, as a geologist in Ventura, California, and later as Bakersfield Division Geologist for Conoco. He left Bakersfield in 1955, working until 1970 in Conoco. He left Bakersfield in 1955, working until 1970 in Conoco. Dan concluded his professional career in the early 1980s by working for 10 years in Indonesia, including a supervisorial position for Asamera, Inc. in Sumatra and Malaysia in S.E. Asia.

Dan had been retired for several years and was living in Hallettsville, Texas. Submitted by Richard Bower Haines of Ventura.

Four employees of Chevron U.S.A. Inc. including the Company's president, were among the 44 people killed aboard the P.S.A. crash near Paso Robles in December. They are James R. Scylla, Chevron U.S.A. president, Owen F. Murphy regional vice president for General Representation; Jocelyn G. Kempe Public Affairs manager for Ventura and Santa Barbara areas; Allen F. Swanson Public Affairs manager for the Orange County and Arizona areas.

### **OFFSHORE NEWS**

The Minerals Management Service presented its District Safety Award for Excellence (SAFE) to UNOCAL on October 28th. The award is presented semi-annually for a single platform, rig, lease or field. Unocals award is for the period January 1 - June 30, 1987.

A Sale 95 Area ID map and block list are available. For copies or further information call Ann Copsey, Mineral Leasing Specialist, at (213) 894-7107, or Mel Horton, Sale 95 Leasing Coordinator, at (213) 894-6755. The next opportunity for public comment on Proposed Sale 95 occurs with the release of the Draft EIS, which is currently scheduled for July 1988. For information on Sale 95 Draft EIS, contact George Hampton, Sale 95 EIS Coordinator, at (213) 894-6744.

The Draft EIS for Sale 91, Northern California is being completed and is to be released at the years end (1987).

Environmental studies announced by the American Petroleum Institute indicate a very subtle impact on anchovy fish populations from seismic air gun blasts during data collection in California waters.

Bio-Tech Communications of Portland, Oregon will conduct meetings in Portland May 23-25 on recommendations for studies in Washington and Oregon relative to Offshore Oil and Gas development. The meeting will be open to the public and is part of MMS efforts in planning development of the Oregon and Washington frontier area. Contact Martin Golden at (213) 894-7105. The Environsphere Co. will conduct a vearlong study in coastal circulation along Washington and Oregon. See Northwest section news for related information this issue.

SAIC (Science Applications International Corporation) will conduct a two year study on the impact on bethic communities by future OS oil and gas activities.

Lease OCS-P 512 awarded in Sale 80 has submitted an exploration plan. The operator will be Texaco, eight well locations have been designated the initial well is planned to be drilled in the first quarter of 1988.

A central Gulf of Mexico Sale is announced for next March in New Orleans. The tracts cover 33.5 million acres from offshore Louisiana to Alabama in water depths from -13 to -10,500 feet. Closer to home the Chukchi Sea Sale #109 is set for May in Anchorage. The sale will offer 5,450 blocks covering about 29.5 million acres in water depths of -26 to -263 feet from 3 to 239 miles off of northwestern Alaska. The Interior Dept. conditional reserves are estimated to be 2.68 billion bbl and its probability of hydrocarbons is 0.2%.



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### **EXCELLENCE OF** PRESENTATIONS AWARDS **ANNOUNCED**

The Society of Economic Paleontologists and Mineralogists announces the recipients of the 1987 Excellence of Oral Presentation and Excellence of Poster Presentation Awards for papers presented at the 1987 AAPG-SEPM Annual Meeting in Los Angeles. The winner of the Excellence of Oral Presentation Award is Dr. David W. Houseknecht of the University of Missouri. Dr. Houseknecht's presentation "Relationships Among Thermal Maturity, Sandstone Diagenesis, and Reservoir Quality in Pennsylvanian Strata of the Arkoma Basin" was coauthored by Lori A. Hathon, also of the University of Missouri.

Two poster sessions received the Excellence of Poster Presentation Awards. Shea Penland, Elisabeth Kosters, and John R. Suter received recognition for the presentation entitled "New Depositional Model for the Mississippi Delta Plain." Evan K. Franseen, Lloyd C. Pray, and Thomas E. Fekete received an award for their presentation "Mid-Permian Shelf Margin Erosion Surfaces, Western Escarpment, Guadalupe Mountains, Texas."

Honorable Mention was made for poster sessions presented at the meeting. They are: Ellen C. Lawson, "Megabreccias and Associated Carbonates of the Rader Member, Capitan Reef Complex (Permian), Guadalupe Mountains, West Texas"; Karen A. Kurkjy, John C. Smith, and Arthur S. Trevena, "Loss of Porosity and Permeability in Lithic Sands Assessed with Compaction Experiments"; Thomas R. Clifton, 'Formation of Inversely Graded, Down-stream-Dipping, Low-Angle Cross-Stratification by Antidunes"; and Pamela Leschak and R.E. Ferrell, Jr., "Origin of Clay-Size Quartz Particles in the Suspended Load of the Mississippi River.'

### **AAPG Atlas of Seismic** Stratigraphy Now Available

The Atlas of Seismic Stratigraphy (Studies in Geology #27) is a new seismic companion volume to the highly successful three volume atlas of structural styles (Studies in Geology #15, a highly useful reference work of structural interpretation using reflection profiles). The new atlas set, also divided into three volumes, shares much in common with its predecessor, most notably:

1. over sized format of interpreted and uninterpreted seismic line reproductions:

2. reflection profiles from around the world.

The first volume should be printed and available now. New Vail sequence stratigraphy definitions and procedures and a color atlas of seismic stratigraphy by the Shell Oil Company is also included in introductory chapters. Volume Two is scheduled for publication in March 1988, will contain 28 papers that will discuss and illustrate rift systems and passive margins. Volume Three will address the Gulf of Mexico, foredeep environments, active margins and deep-sea stratigraphy. Prices are comparable to those of the structural volumes already published.

### **EDITOR RESIGNS**

Citing conflicts between editorial duties and his consulting business AAPG editor, Russ Robinson, submitted his resignation to President Dan Pasquini. Robinson had been editor since 1985 when Judy Russell resigned to take an assignment in Columbia.

In the concluding paragraph of his letter, the former editor called for the executive board and Pacific Section members alike to support and help Pat Bell, who has accepted the editorship.

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### RECOMMENDED READING

### AMERICAN ASSOCIATION PETROLEUM GEOLOGISTS BULLETIN, volt. 71, no. 10,

Field development is the future of petroleum geology, by James A. Helwig.

Predictive isopach mapping of gas sands from seismic impedance: Modeled and empirical cases from Ship Shoal Block 134 Field, by Robert D. Woock and Alan R. Kin.

Capillary pressure techniques: Application to exploration and development geology, by Jeffrey B. Jennings.

Multiscale anatomy of a reservoir: Geological characterization of Pembina-Cardium Pool, West-Central Alberta, Canada, by F.F. Krause, H.N. Collins, D.A. Nelson, S.D. Machemer, and P.R. French.

### GEOLOGY, Vol. 15, no. 10, October 1987

Dinosaurs, sperules, and the "magic" layer: A new K-T boundary clay site in Wyoming, by Bruce F. Bohor, Don A. Triplehorn, Douglas J. Nichols, and Hugh T. Millard, Jr.

Glass in garnet pyroxenite xenoliths from Kaula Island, Hawaii: Product of inflitration of host nephelinite, by Michael O. Garcia, and A.A. Presti.

Structure of the southeast margin of the Beaufort-Mackenzie basin, Arctic Canada, from crustal seismic-reflection data, by Frederick A. Cook, Kevnin C. Coflin, LrryS. Lane, et al.

Sediment-yield history of a small basin in southern Utah, 1937-1976: Impliaitons for land management and geomorphology, by Richard Hereford.

### GEOLOGICAL SOCIETY OF AMERICA BULLETIN Vol. 99 no. 4, October 1987.

Tectonic significance of a Early Proterozoic twoprofince boundary in central Arizona by Karl E. Karlstrom, Samuel A. Bowring, and Clay M. Conway.

Triassic olistostrome and shelf-basin transition in the western Great Basin: Paleogeographic implications, by Frederick R. Heck and Robert C. Speed.

### GEOLOGICAL SOCIETY OF AMERICAN BULLETIN, vol. 99, no. 3, Sept. 1987

Fan-deltas and braid deltas: Varieties of coarsegrained deltas, by John G. McPherson, Ganapathy Shanmugam, and Richard J. Moiola.

### GEOLOGY, vol. 15, no. 2, September 1987.

Two-stage vesiculation in the Cohassett flow of the Grande Ronde Basalt, south-central Washington, by Kent McMillan, Randal W. Cross, and Philip E. Long.

Orientation of specimens: Essential data for all fields of geology, by D.J. Prior, R.J. Knipe, M.P. Bates, N.T. Grant, et al.

Organic carbon losses during burial and thermal maturation of normal marine shales, by Robert Raiswell, and Robert A. Berner.

Single-channel seismic reflection data from the East Pacific Rise axis between latitude 11°50' and 12°54'M. by Felix Avedick and Louis Geli.

#### U.S. GEOLOGICAL SURVEY

Professional Paper 1416: Geology of the Blue Mountains region of Oregon, Idaho, and Washington: The Idaho Batholith and its border zone, edited by T.L. Vallier (U.S.G.S.), and H.C. Brooks (Oregon Depts. Geology & Mineral Industries.)

Bulletin 1672: Geology and geomorphology of the south-western Moenkopi Plateau and southern Ward Terrace, Arizona, by G.H. Billingsley.

Bulletin 1691: Pennsylvanian and Permian stratigraphy of the northern Argus Range and Darwin Canyon area, California, by

Bulletin 1692: Stratigraphy of the Owens Valley Group (Permian), southern Inyo Mountains, California, by Paul Stone and C.H. Stevens.

Bulletin 1698: U.S. earthquakes, 1983, edited by C.W. Stover.

Circular 0947: Integrated instrumentation plan for assessing the seismic response of structures: a review of the current USGS program. by Mehmet Celebi, Erdal Safak, et al.

Circular 0954: Core index, a numerical corelogging procedure for estimating rock quality, by J.R. Ege.

Circular 9061: Conference on Continental margin mass wasting and Pleistocene sealevel changes, August 13-15, 1980, edited by D.W. Folger and J.C. Hathaway.

Map I-1767: Geologic map of the Quaternary and Tertiarydeposits of the Big Dune quadrangle, Nye County, Nevada, and Inyo County, Calif., by W.C. Swadley, and W.J. \$3.10 Carr

Map MF-1920: Seismic reflection profile across the Coast Ranges of Central California: Morro Bay to the San Andreas Fault, by A.M. Trehu, and W.H. Wheeler, IV. \$1.50

Lucy Birdsall

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